بسم الله الرحمان الرحيم

In the name of God, Most Gracious, Most Merciful

Six-Day Model of Creation

Zakaria Kamal

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Six-Day Model of Creation

The Six-Day Model of Creation belongs to the Holy Bible. The Quran follows this model and helps to explain it.

Apparently, the Six-Day Model of Creation may seem unscientific. However, it becomes scientifically plausible when we interpret the 'Six Days' as 'Six Periods of Time.' In this book, the 'Six-Day Model of Creation' is discussed scientifically, with the 'Six Days' being understood as 'Six Periods of Time.' The discussion will proceed in the following sequence:

1. Six Days in the Holy Bible
2. Creation of the Universe
3. Future the Universe
4. The Quran's Model of the Universe
5. Creation of the Earth
6. An Earth for Adam and Eve
7. The Coach and the Canopy
8. Creation of Life on Earth
9. Three Torturous Undertakings of Allah
10. Biological Evolution
11. Creation of Adam
12. Missing Link
13. Branching Process
14. Unique Adam
15. Six Days in the Quran
16. Likely Lengths of Four Days
17. Age of the Universe
18. Time Line
19. Conclusion

Initially, the explanation of the 'Six Days' relies on several assumptions. These assumptions are later validated as they align with modern discoveries and fit into the overall narrative.

1. **Six Days in the Holy Bible**

The Holy Bible does not exist in its original language. During the process of translation into other languages, the wordings of some verses have changed, some verses have been intentionally altered, some have been misplaced, and some others have been forgotten. Therefore, we should not interpret the Bible in the same way we interpret the Quran. The Quran is taken literally, and we understand and explain its verses as we understand and explain laws and definitions because these are unchanged words of God.

In the Holy Bible, we should focus on the main message of a verse rather than the implication of each individual word, because these words have been translated from other languages.

The Quran confirms whatever came before it. If a verse of the Holy Bible does not contradict the Quran or its concepts, then we may accept the verse as correct in its intended meaning.

The Holy Bible provides a detailed description of the Six Days. I have quoted the important parts in sequence.

1a. First Day – Holy Bible

The universe was created from a Soul that was hovering over the water:

> “In the beginning, when God created the Universe,
> the Earth was non-existent. The raging ocean that

> covered everything was engulfed in total darkness and the Soul of God was hovering over the water."
>
> – Genesis 1: (1–2), Holy Bible, GNB

The Quran also mentions the same water:

> "He it is Who created the "Skies and Lands" (the Universe) in six days and His Arsh was over the waters." [Al Quran 11:7]

God created the water before the Big Bang. Therefore, the water existed beyond the space of this universe—it was in the Super Space. Thus, our universe (Skies and Lands) is one of God's creations.

The soul of God was hovering over the water. It was not God's own soul, but a soul provided by Him. In the Knox Bible (a Catholic Bible), this soul is referred to as the 'breath of God:

> "God, at the beginning of time, created heaven (sky) and earth. Earth was still an empty waste and darkness hung over the deep, but already over its waters stirred the Breath of God. Then God said, "Let there be light," and the light began".
>
> – Genesis 1 (1-2), Holy Bible (Knox)

Therefore, the soul being a breath of God was a 'Provided Soul' that was used to create the universe. God provided the soul from His own soul, permeating His body in form.

The Quran speaks of a Soul Single (Nafsin-Wahidatin), which can be related to the provided soul:

> "It is He Who hath produced you from a Soul Single (Nafsin-Wahidatin); here is a place of dwelling and

storage; we detail Our signs for people who understand.” [Al Quran 6:98]

“He created you from a Soul Single (Nafsin-Wahidatin); then created favorable Pairs (double helix DNA molecule); and he sent down for you of the cattle eight Pairs; He creates you in the wombs of your mothers—creation after creation—three tortures (on Allah). That Allah is your Lord; for Him is the dominion. There is no god but He. Then how are you turned away?” [Al Quran 39:6]

To understand, how the universe has been created from a soul, we are to know, what is soul?

We tend to think of the soul as a spiritual entity that determines one’s shape and nature, sustaining one’s body as a living being. However, the soul is not limited to living creatures. According to the Hadith, even matter has soul. A magnetic field helps sustain an atom and keeps it functional, or 'alive.' Therefore, the magnetic field can be considered an ingredient of the soul of atom. In essence, a soul and a force field are the same thing.

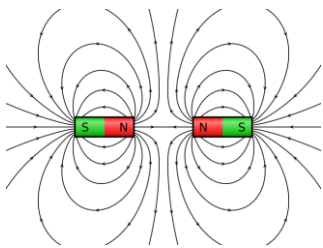

FIGURE 1: Magnetic Fields

My identification of the magnetic field as a kind of soul is supported by the following verse.

> “They ask thee concerning the ruh (elementary soul). Say: “The ruh is command of my Lord”; of knowledge it is only a little that is communicated to you.” [Al Quran 17: 85]

The verse encourages us to understand a *ruh* (an elementary soul) as a command of Allah. We observe in nature that Allah has designed and invested force fields as commands. For example, the Earth has a vast magnetic field that protects us from the Solar Wind. In this way, the Earth's magnetic field acts as a command to the Solar Wind, preventing it from entering. Thus, a ruh (an elementary soul) and a force field are essentially the same thing.

A combination of two or more force fields (ruhs / elementary souls) forms a composite soul. This composite soul is called ‘nafs.’ The plural form can be written as ‘nafses.

A nafs sustains a system and keeps it functional or 'alive.' For example, the nafs of an atom is a combination of three force fields: the Magnetic Force Field (a ruh), the Strong Nuclear Force Field (a ruh), and the Weak Nuclear Force Field (a ruh). The nafs (composite soul) holds the particles, such as electrons, protons together, and forms the atom.

Here, we can conclude that:

- A force field and a *ruhh* (elementary soul) are the same thing, functioning as a command of God.
- A combination of two or more force fields that support a living or non-living system is called a *nafs* (composite soul).

The 'Provided Soul' was hovering over the water. When God commanded, 'Let there be light,' the Provided Soul disintegrated, and the light appeared.

"Then God commanded, "Let there be light" and light appeared." – Genesis 1:3, Holy Bible, GNB

Light is an Electromagnetic Force Field. Two other force fields that originated from this Provided Soul were the Strong Nuclear Force Field and the Weak Nuclear Force Field. These force fields produced atoms through what we refer to as the Big Bang.

In scientific community the Provided Soul is called GUT Force.

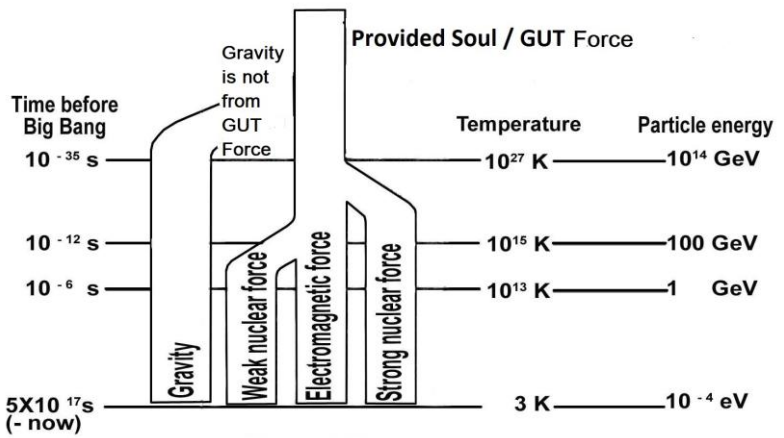

FIGURE 2: Provided Soul / GUT Force

The Provided Soul was a part of Nafsin-Wahidatin. Another part of Nafsin-Wahidatin produced the water, either through a different Big Bang or a different process.

Nafsin-Wahidatin also produced several kinds of unknown force fields, which have not yet been discovered. These unknown force fields (ruhs / elementary souls) gave rise to the nafses (composite souls) of living creatures. Emotions arise from these unknown force fields within the nafses.

[The soul is deliberately discussed in my Tafsir, *Scientific Tafsir of the Quran*, available as free PDF in my web page.]

1b. Second Day – Holy Bible

In the next phase, the light that had appeared was separated from the darkness.

> "God was pleased with what He saw. Then He separated the light from the darkness."
> – Genesis 1:4, Holy Bible, GNB

Probably, the light that originated from the Provided Soul was absorbed into a black hole outside the water-ball. It had a light-emitting white hole at the center of the water-ball. The white hole was the Big Bang. Thus, the light was pushed into the center of the water-ball through a passage of space.

The idea of moving through a black hole was explored by Stephen Hawking in his book *Black Holes and Baby Universes*. According to Hawking, as a black hole disappears, the matter that had fallen into it can re-emerge through another white hole at a great distance. This matter is then sent off into a baby universe, a small, self-contained universe that branches off from our region of the universe.

In this context, Hawking made a critical analysis of time, considering the time of the baby universe as imaginary time. In the scenario described in the Holy Bible, the Big Bang represents the baby universe. Thus, our time is imaginary time, which began at the moment of the Big Bang.

> "And He named the light 'day' and the darkness 'night'. Evening passed and morning came that was the first day" – Genesis 5, Holy Bible, GNB

After the Big Bang, universal time began. Almighty God named the light 'day' and the darkness 'night.'

> "Then God commanded "Let there be dome to divide the water and to keep it in two separate places"—and it was dome. So, God made a dome, and it separated the water under it from the water above it. He named the dome "sky". Evening passed and morning came that was the second day"
>
> – Genesis 1: (6–8), Holy Bible, GNB

The verses say that the dome was named 'sky.' In the Holy Bible as well, the 'sky' refers to this 'universe.' Thus, the dome is the universe in which we live—we are living inside the dome / sky / universe. Initially, the dome was filled with smoke (hydrogen and helium mainly).

Therefore, the Big Bang occurred at the center of a huge water-ball. It primarily produced hydrogen and helium (smoke). These gases formed a massive bubble (dome) at the center of the water-ball. Since a bubble and a dome appear similar, it has been referred to as a dome in the Holy Bible.

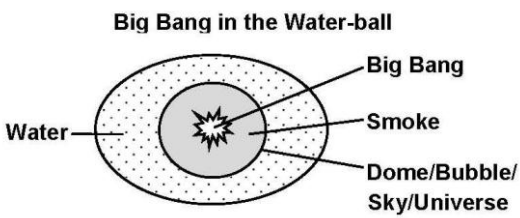

FIGURE 3: Big Bang in the Water Ball

When a bubble forms in water, it rises to the surface. However, the enormous water-ball was floating in Super Space, with no up or down. The bubble (dome) was

expanding rapidly at the center of the water-ball. This expanding bubble formed the universe.

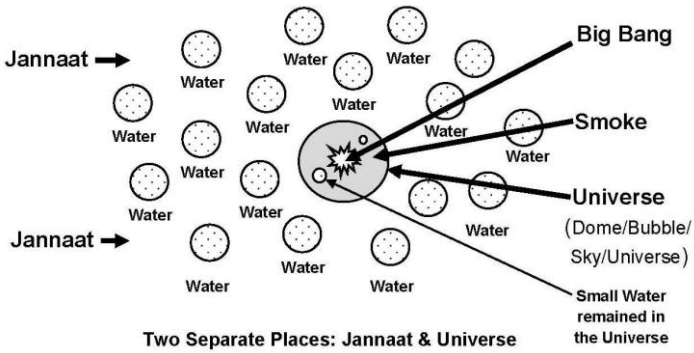

FIGURE 4: Two Separate Universes

Eventually, the water-ball burst due to the expanding bubble. The water, gaining greater momentum, moved away from the bubble. This water was then used to create another universe, called Jannaat.

The verses under discussion refer to "two separate places": *"Let there be dome to divide the water and to keep it in two separate places"*. These two separate places are two universes: the *Samawaat* (Skies / this universe) and the *Jannaat* (another universe).

We know from the Quran that the width of the Jannaat is equal to the width of the Samawaat (this Universe). If two entities are equal in width, one cannot be contained within the other. Therefore, the Jannaat is a separate universe altogether.

> "Race to forgiveness from your Lord and the Jannaat; the width of which is as the width of the Sky and Land (Universe)" [Al Quran 57:2]

"Be quick in the race for forgiveness from your Lord and for a Jannaat, whose width is that of the Skies and Lands (this universe), prepared for the righteous…"
[Al Quran 3:133]

Holy Bible also says about two universes:

"Because only a few will be saved, God has created two universes instead of only one"
– 2 ESDRAS 7:50, Holy Bible, GNB

One may try to imagine how much water was needed to create billions of habitable planets in the Jannaat. The water was primarily created for the Jannaat, with only a small quantity given to this universe (Samawaat), mainly for the Earth.

1c. **Possibility of a Big Bounce**

As the Big Bang occurred in the water-ball, much of the force of expansion was transferred into the water, halting the expansion of the universe at a certain stage. The universe then could contract due to gravitational force and reinitiate from a Big Bounce, as a Seven-Sky-Universe. The Skies are spherical waves of space, one inside another, like the layers of an onion.

The contracting universe of the preceding cycle could produce silicon and lighter elements to produce dust, asteroids and long lasting stars. So, the First Generation Stars were not needed.

In the expanding skies of the present universe, the matter could concentrate into the clouds rapidly to form the galaxies.

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1d. **Third Day – The Holy Bible**

Holy Bible at this stage begins narrating the creation of life on Earth.

There is a gap between the second day and the third day. The Quran marks this gap clearly, as it narrates the creation in two distinct periods: 'two days' and 'four days.' These are isolated periods of time—during the two days, the universe was created; in the subsequent four days, the Earth was made suitable for Adam by creating the necessary nature, plants, and animals.

> "Then God commanded, "Let water below the sky
> come together in one place, so that land will appear"
> … pleased with what He saw"
> – Genesis 1 (9–10), Holy Bible, GNB

A small quantity of water remained in the universe. Later, the Earth was supplied with water from this source, given in the proper measure to ensure that the land could appear (the continents would not sink).

It has yet to be discovered where the water on Earth came from. Scientists predict that the Earth was formed from small solid particles produced in stars, but these particles could not have carried water with them to form the oceans. No reasonable assumption fully explains this issue. One must straightforwardly acknowledge that water is a special gift from Almighty God. The Earth has been uniquely prepared for a water-based creature like us.

Adam was originally created for Jannaat, which is filled with water. Therefore, the Earth needed water to serve as Adam's exile home. There are indications that the oceans formed due to the impact of water-bearing asteroids.

As water settled on Earth, the creation of life began. The first living creatures were single-celled organisms. Through guided evolution, these organisms developed into grain-bearing and fruit-bearing plants:

> "Then He commanded "Let the Earth produce all kinds of plants, those that bear grain, and those that bear fruit…that was the third day"
>
> – Genesis 1 (11–13), Holy Bible, GNB

A time came when the Earth was full of plants. These plants made the Earth suitable for animals by producing soft-soil crust and likely free oxygen in the atmosphere.

1e. **Forth Day – The Holy Bible**

> "Then God commanded "Let lights appear in the sky to separate day from night and to show the time when days, years and religious festival begin…Evening passed morning came; that was the fourth day."
>
> – Genesis (14–19), Holy Bible, GNB

Now, in the above verses, the Holy Bible speaks of the earthly days and nights, which were established on the Fourth Day. During this time, Almighty God adjusted the rotation of the celestial bodies. The Sun was created to give light, and the Moon was placed to help reckon the days, months, and years, functioning as a natural calendar.

The Earth and the Moon had some form of order that allowed plants to grow, but this order was adjusted on the Fourth Day to create higher animals.

Before the Fourth Day, the lengths of day and night, along with related factors like temperature, humidity, and seasons, were likely suitable for plants but not for animals.

For example, if the Earth had an eight-hour day and an eight-hour night, plants might have grown faster, but it wouldn't have been suitable for animals, as they need both rest and time for hunting. Scientists predict that Earth's rotation was once much faster, with a six-hour day around 4.5 billion years ago.

1f. **Fifth Day – The Holy Bible**

On the Third Day, the plants were created. On the Fourth Day, God did not create anything. During this time, the plants were evolving, growing, and dying to make the Earth suitable for higher animals. On the Fifth Day, God began the creation of animals. First, the marine animals were created, followed by the creation of birds.

> "Then God commanded Let the water be filled with many kinds of living beings, and let the air be filled with birds…Evening passed morning came; that was the Fifth Day."
>
> – Genesis 1: (20–23), Holy Bible, GNB

The above verses describe the creation of marine animals first, followed by the creation of birds. This sequence mirrors the progression suggested in the theory of Modern Biological Evolution: plants → marine animals → amphibians → reptiles → birds. The subsequent verses then describe the creation of both domestic and wild animals:

> "Then God commanded "Let the Earth produce all kinds of animal life, domestic and wild, large and small—and it was done…pleased with what He saw"
>
> – Genesis 1: (24–25), Holy Bible, GNB

After the creation of birds, the verses describe the creation of mammals. Once again, this follows the sequence proposed in the theory of Modern Biological Evolution: plants → marine animals → amphibians → reptiles → birds → mammals.

The following table is taken from *The New Encyclopedia Britannica*, except the rightmost column, which I have inserted to show the support of Holy Bible to the Theory of Biological Evolution.

Progression of Animals, as has been discovered		**Holy Bible indicating Biological Evolution in the Sequence of Description**
Age of Era	**System**	
Precambrian 4500–3300 Million Years	Old single-cell and multi-cell creatures (plants)	"…Let the Earth produce all kinds of plants…"
Paleozoic 600–280 Million Years	Fishes and Reptiles	"…Let the water be filled with many kinds of living beings…"
Mesozoic 230–135 Million Years	Dinosaurs, Flying Reptiles, Birds	"…and let the air be filled with birds…"
Cenozoic 63–13 Million Years	Mammals	"Let the Earth produce all kinds of animal life, domestic and wild, large and small…"

1g. **Sixth Day – The Holy Bible**

> "Then God said, "And now we will make human being…Evening passed morning came…that was the Sixth Day." – Genesis (26–31), Holy Bible, GNB

In the process of creating plants and animals, Almighty God said, *'Let there be…'* as a blessing or permission to proceed. This signifies that He embedded the process of biological evolution from the beginning; angels were monitoring the process, He observed the final outcome of each phase, became pleased, and granted permission to move forward.

But, in the case of humans, Almighty God said, *'And now We will make human beings…'* It was not *'Let there be…'* This indicates that Almighty God created humans separately.

2. **Creation of the Universe**

The Quran confirms the key points of the Holy Bible. To better understand what the Quran says about the 'Six-Day Model of Creation,' we need to consider a few modern discoveries. These discoveries are described below

2a**. Galaxies**

In the 1920s, American scientist Edwin Hubble demonstrated that stars were not randomly scattered throughout the universe; instead, they were grouped into systems called galaxies. There are approximately 170 billion large galaxies in the visible universe.

In the Quran, galaxies are referred to as 'Houses of Stars' (Mawaqin-Nujumi):

> "But nay, I swear by the 'Houses of Stars' (Mawaqin-Nujumi). And, indeed, it surely a swear if you know great (structures)" [Al Quran 56:75-76]

'Mawaqin' means 'Houses,' and *'Nujumi'* means 'Stars.' Therefore, *'Mawaqin-Nujumi'* translates to 'Houses of Stars.'

Since only a galaxy can be called a 'House of Stars,' 'Mawaqin-Nujumi' refers to 'Galaxies.'

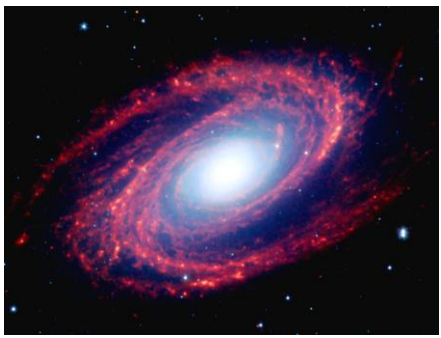


FIGURE 5: A galaxy

In the Quran, our Milky Way Galaxy is referred to as *'Falakin,'* which means 'a sphere / a sphere of space' or 'a float / a ship / a space ship':

> “It is He Who created the Night and the Day; and the Sun and the Moon- each in 'a sphere' (Milky Way Galaxy) floating.” [Al Quran 21:33]

> “It is not permitted to the Sun to outstrip the Moon, nor can the night outstrip the day; and all are in 'a sphere of space' (Milky Way galaxy) floating.”
> [Al Quran 36: 40]

The sphere in which the Sun and the Moon are floating is the Milky Way Galaxy. Therefore, 'Falakin' refers to the 'Milky Way Galaxy.'

2b. **The Great Expansion**

Hubble discovered that all distant galaxies were moving away from us, which indicated that the universe was expanding.

The farther away a galaxy is, the faster it moves away. The recession velocities are proportional to their distances. Nearby galaxies are receding at speeds of about 200 to 300 miles per second, while the farthest galaxies discovered so far are receding at speeds approaching the speed of light. This observation indicates that the universe is expanding.

This phenomenon is expressed in the Quran in the following way:

> "And the Sky (Universe), We constructed it with hands, and indeed, We surely are Expanders"
>
> [Al Quran 51:47]

2c. **Dark Nights / Olber's Paradox**

The light has no destruction. The scientists calculate that if the galaxies were not receding, the sky would be full of light, forty thousand times brighter than the sun at noon. There would be no night, no sunlit day.

The universe is expanding, causing the light emitted by galaxies to fade as it travels through the expanding space. This results in darkness spreading throughout. At dawn, the Sun breathes out the darkness, bringing light to the Earth.

> "What! Are you more difficult to create, or the Sky? He has constructed it. He has raised its thickness and proportioned it. Its night does He endow with darkness, and its splendor does He bring out"
>
> [Al Quran 79: 27–29]

> "So verily I swear by the receding ships (space ships / galaxies) disappear—and the night as it departs, and the dawn as it breathes." [Al Quran 81:15-18]

The above verses are translated directly, word-for-word. The ships (space ships / galaxies) are disappearing due to their recession. As the space expands, the light emitted by the stars fades into the darkness of the night everywhere. Thus, dawn can appear with the sunrise.

> "And a Sign for them is the Night. We withdraw there-from the Day (by rotating the Earth), and behold, they are plunged in darkness"
>
> [Al Quran 36:37]

The key question - a deceptively simple one was asked by a man who we might justly regard as the first cosmologist: de Cheseaux (1744). It was he who first wondered why a supposedly infinite universe full of bright stars should be dark at night. Alas for de Chesaux no one else at that time seemed able to realize the significance of his question. It was thought up again independently by a German astronomer Wilhelm Olbers in 1826. For this reason, the puzzle is known ''Olber's Paradox" – The Expanding Universe by John Gribbin in the Encyclopedia of Space Travel and Astronomy edited by John Man.

"To look at the problem, imagine thin layers, or shells of stars surrounding the Earth. The intensity of light from all stars in any one shell can easily be worked out. The distance cancels out the increase in star light. Never the less in an infinite universe, there would be an infinite number of shells so that we might guess that the universe should have an infinite bright sky. In fact though nearby stars block out some

of the light from further away when this is taken into account, we can say that the night sky should be 'only' as bright as the surface of an average star in total, just 40,000 times the brightness of the Sun at noon. The puzzle is not therefore, why is the sky dark at night. It is why the sky is so dark even in day time." – The Expanding Universe by John Gribbin in the Encyclopedia of Space Travel and Astronomy.

The sky should have been crammed with stars, forming a carpet far brighter than the Sun. Yet, no one could answer where the light was going. This became known as 'Olber's Paradox.'

In 1929, the paradox was resolved when Edwin Hubble demonstrated that the universe was expanding. This expansion provided the solution to the problem:

"Expansion solves the problem. The light and heat from all the objects in the sky has to spread over more thinly into the void to fill the increasing space between them. This effectively weakens the light, lowering the density of the energy of starlight- the brightness of the sky- everywhere. The faster each light source recedes, the weaker its contribution will be, and in a universe with the more distant shells receding more rapidly than those nearby, only the very nears are left making any noticeable contribution to conditions here on the Earth." – The Expanding Universe by John Gribbin in the Encyclopedia of Space Travel and Astronomy.

If the universe were static (not expanding), there would be no night; the sky would always be forty thousand times brighter than the sun at noon. Darkness exists because the universe is expanding. In other words, only an expanding universe can have a dark sky at night.

It is now said that scientists should have understood the expansion of the universe long before Hubble's discovery,

simply by observing 'Olber's Paradox,' because only in an expanding universe can the nights be dark.

> "So verily I swear by the receding ships (space ships / galaxies) disappear—and the night as it departs, and the dawn as it breathes.
>
> Verily, this is the word of a most honorable Messenger, endued with Power, with rank before the Lord of the Arsh. With authority there, faithful to his trust; and your companion is not one possessed"
>
> [Al Quran 81:15–22]

2d. **The Singularity**

If the galaxies are moving away from each other, it's evident that they were once much closer together at an earlier point in time. Yesterday, they were closer than today; the day before yesterday, even closer. This means that, at some point in the distant past, all the galaxies in the universe were packed into a small volume of space. This implies that the expansion of the universe must have begun with a great original explosion.

"For, as many astronomers were quick to see, if the universe is expanding now, then it must have started form some great original explosion. This is the Big Bang model of the universe"– The Expanding Universe by John Gribbin in The Encyclopedia of Space Travel and Astronomy edited by John Man.

The following verse is often cited in support of the Big Bang theory.

> "Do not the unbelievers see that the Skies and Lands were joined together before We clove them asunder…" [Al Quran 21:30]

The Big Bang theory could primarily produce hydrogen and helium. But, the above verse suggests the presence of heavier elements, at least up to silicon, in the early universe—elements that could lead to the formation of lands (dust and asteroids). This implies that the origin of the universe may be better explained by a 'Big Bounce' model. Therefore, the verse supports the Cyclic Model of the Universe.

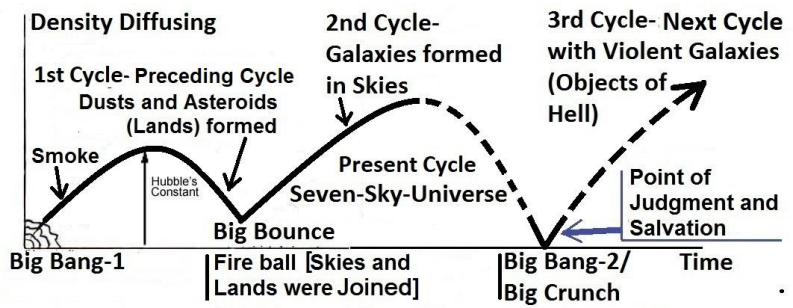


FIGURE 6: The Quran's Model of the Universe

A cyclic universe may be ever-existing. However, the Quran does not support the idea that the Universe has existed forever. It was created at the beginning of the preceding cycle.

After the discovery of Background Radio Noise, scientists predicted that the universe began from a super-hot, super-dense point called the 'Singularity.' The event at the beginning of the universe is referred to as the Big Bang.

"Of course the fact that the universe is expanding implies that at some point in the past, all the objects in it were closer together. But we see very clear evidence that the universe we know today began as a super-dense, super-hot 'Singularity"

– The Encyclopedia of Space Travel and Astronomy

All the matter in the universe was compressed into the Singularity. Matter could not exist in that state; it existed as radiation. As the universe began to expand, the temperature decreased, and the radiation (light) transformed into matter.

The separation of galaxies and the rate of expansion suggest that the universe came into existence between 8,000 and 14,000 million years ago.

"By timing the expansion of universe, we can now say that it came into existence no longer than 20,000 million years ago in a monumental fire ball that provided raw material from which galaxies, stars and planets are still formed. We see around us the effect of that violent birth. The galaxies as we know form studying energetic dense quasar like 3c 273 are fleeing from us at speed up to 80 percent of the speed of light."

– The Encyclopedia of Space Travel and Astronomy

In light of the above verse (21:30), the universe began as a Singularity / Big Bang in the preceding cycle. The present cycle of the universe began with a Big Bounce, when the single-sky universe of the preceding cycle transformed into the seven-sky universe of today. The skies are waves of space, one inside another, like the layers of an onion.

> "Moreover, did *istawa* (by infusing gravitational force) into the Sky (single-sky-universe of preceding cycle), while it had been smoke. He said to it and to the lands (formed after the *istawa*): "Come ye together, willingly or unwillingly". They said: "We do come in willing obedience" (thus, the Big Bounce occurred). So, He completed them as Seven Skies (seven-sky-universe of present cycle formed) in **two Days**..." [Al Quran 41:11-12]

2e. **Smoke**

In the beginning of the preceding cycle, radiation turned into the simplest form of matter, hydrogen, made up of one proton and one electron. Later, twenty-five percent of the hydrogen transformed into helium, along with small amounts of heavy hydrogen and other elements. The stars of the early universe formed from these two gases mainly.

"The primordial fireball contained reactions which led to the present distribution of hydrogen and helium 75% and 25% respectively, a balance that explains the evolution of stars…"– Dawn of A New Era by Sir Bernard Lovell in The Encyclopedia of Space Travel and Astronomy

> "Moreover, He put His attention to the Sky (single-sky-universe of the preceding cycle), and it had been smoke…'' [Al Quran 41:11]

2f. **Formation of Heavier Elements**

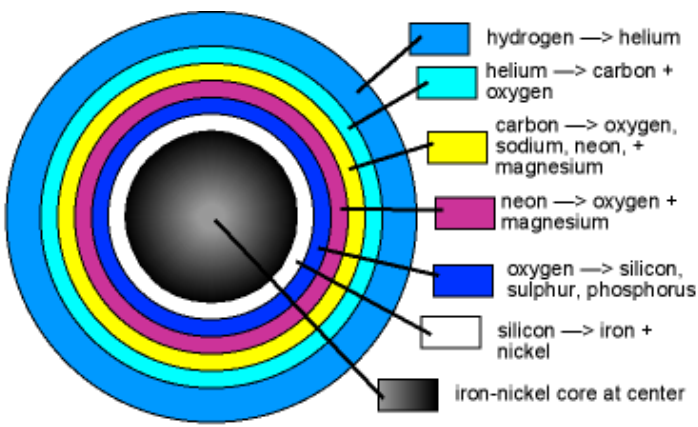
A star can form from hydrogen and helium. Helium, being heavier than hydrogen, settles into the core. Gravity continuously contracts the star, which increases pressure and heat at the center. At a certain point, the pressure and heat initiate nuclear fusion reactions in the core of the star, producing increasingly higher temperatures.

On one hand, gravity tries to squeeze the star, while on the other, the heat produced in the core tries to expand it, creating a balance. A balanced star burns for a long time, and progressively produces heavier elements through nuclear fusion reactions.

- Hydrogen undergoes fusion, producing helium. Since helium is heavier than hydrogen, it deposits in the core.

- Helium undergoes fusion, producing primarily carbon and oxygen. Being heavier than helium, carbon and oxygen deposit into the inner core.
- Carbon and oxygen undergo fusion, primarily producing silicon. Silicon, being heavier than carbon and oxygen, moves into the even deeper core.
- Silicon undergoes fusion, primarily producing iron. Iron, being heavier than silicon, deposits at the center

Scientists predict that the first-generation stars formed one to two hundred million years after the Big Bang. These stars were very large, about three hundred times the size of the Sun. A massive star possesses a strong gravitational force, causing the pressure and temperature in its core to increase rapidly. As a result, these stars go through their life cycles in a short period of time before exploding, scattering the heavier elements they produced into space. The long-lasting second-generation stars, like the Sun, and planets like Earth, formed from these scattered elements.


hydrogen —> helium
helium —> carbon + oxygen
carbon —> oxygen, sodium, neon, + magnesium
neon —> oxygen + magnesium
oxygen —> silicon, sulphur, phosphorus
silicon —> iron + nickel
iron-nickel core at center

The "onion layers" of an evolved core of a high-mass star; from hydrogen in the outermost shell to iron at the center.

FIGURE 7: Evolution of High-Mass Star

In view of the Quran, heavier elements, at least up to silicon, were produced in the preceding cycle of the universe, which could have led to the formation of smoke and lands (dusts and asteroids).

Elements heavier than silicon likely produced in the stars of the present cycle.

2g. **Formation of Galaxies**

"The standard picture of galaxy formation envisages to gas collapsing first into a roughly elliptical shape under the influence of gravity, with stars forming out of irregularities in the collapsing cloud. At first large hot stars, composed just of hydrogen and helium, will form in a young galaxy, run through their life cycle quickly and explode, scattering heavier elements into interstellar medium. From these materials, 'Second Generation' stars can form."– To the Edge of Eternity by John Gribbin in The Encyclopedia of Space Travel and Astronomy edited by John Man.

Groups of proto-galaxies were drawn together by gravity. They collided and merged to form the larger galaxies we see today.

Therefore, after the gases concentrated into clouds, the formation of stars and planets was simply a matter of time and evolution. The difficult part to visualize here is how the gases could concentrate into clouds as large as galaxies. In a uniform universe, the gases should have spread out evenly.

"In a perfectly uniform universe, there is no way in which large concentration of gas could ever occur; indeed it is quite difficult to explain how concentration of matter as big as the galaxies could have formed in time since the Big Bang, no more than 20,000 million of years ago. How this happened is not known, but it is straight forward to calculate how a

galaxy would form once these clouds of gas, held together by gravity, and containing enough material to form thousands of millions of stars."– To the Edge of Eternity by John Gribbin in The Encyclopedia of Space Travel and Astronomy edited by John Man

In view of the Quran, the Big Bounce formed seven-sky-universe. The skies are seven super-giant waves of space, one inside another. As the skies (waves of space) expanded, matter could quickly concentrate into clouds, forming large galaxies with long-lasting stars within a few hundred million years. This is confirmed by the Webb Space Telescope.

3. **Future the Universe**

Scientists predict two likely futures for the universe, which are discussed below:

3a. **Open Universe**

The universe is expanding and may continue to expand forever, cooling over time. Eventually, galaxies will be so far apart that the universe will no longer exist as a cohesive unit. Stars will die by radiating energy, and much of the matter will disappear into black holes at great distances. Eventually, the black holes will evaporate, leaving only photons that never decay.

"And what is the fate of the universe? It is possible that the beginning can only be explained by a 'Rediscovery of God' and the end will be infinite dissipation in an infinite void."– To the Edge of Eternity by John Gribbin in *the Encyclopedia of Space Travel and Astronomy* edited by John Man.

In the ever-expanding space, the dead stellar remnants would explode, atoms would disintegrate, and subatomic

particles would decay. What would remain forever are the photons.

If the universe expands forever, it is considered open.

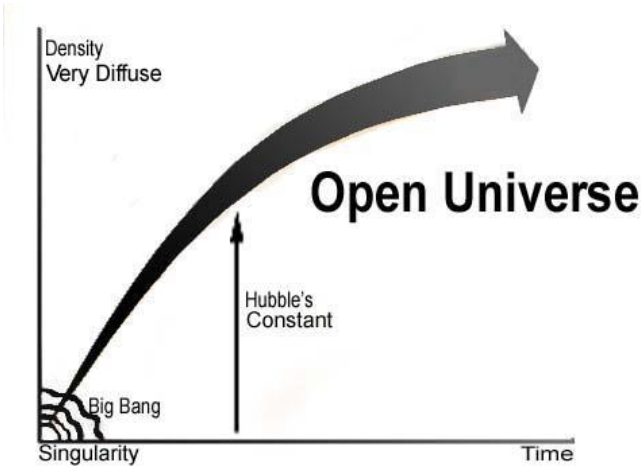


FIGURE 8: Ever Expanding Universe

The figure above depicts the ever-expanding universe. Here, the rate of expansion, expressed as 'Hubble's Constant,' is high. However, I have not found any verse in the Quran or the Holy Bible that directly or indirectly supports the idea of an ever-expanding universe.

3b. **Closed Universe**

The universe is expanding, but the overall gravitational force is working to halt the expansion. If gravity overcomes the force driving the expansion, the expansion of the universe will slow down and eventually reverse, leading to its contraction.

The universe has been expanding for billions of years. If it starts contracting, it will continue to do so for an equal

period of time. In the end, everything in the universe will come together. The massive accumulation of matter, possessing extremely powerful gravitational force, will continue to squeeze the matter toward higher densities. Finally, the universe may be compressed into a super-dense, super-hot point called a Singularity. The Singularity at the end of the universe is known as the Big Crunch.

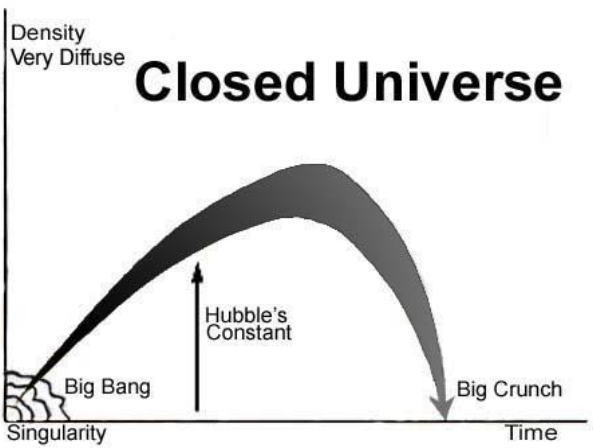


FIGURE 9: Closed Universe

The figure above depicts the Closed Universe Model, where the expansion of the universe stops and contraction begins. Eventually, the universe collapses into a Big Crunch.

3c. **Cyclic Universe**

The universe may collapse into a Big Crunch. The Singularity at the beginning of the universe is called the Big Bang, while the Singularity at the end of the universe is called the Big Crunch. These are essentially the same

concept—singularities—though they occur at different points in time, with the Big Bang marking the beginning and the Big Crunch representing the potential end of the universe.

The Singularity is a super-hot, super-dense point in space-time where known natural laws break down. It is impossible to predict what will emerge from a Singularity. From the Big Crunch (Big Bang–2), the universe may be born anew.

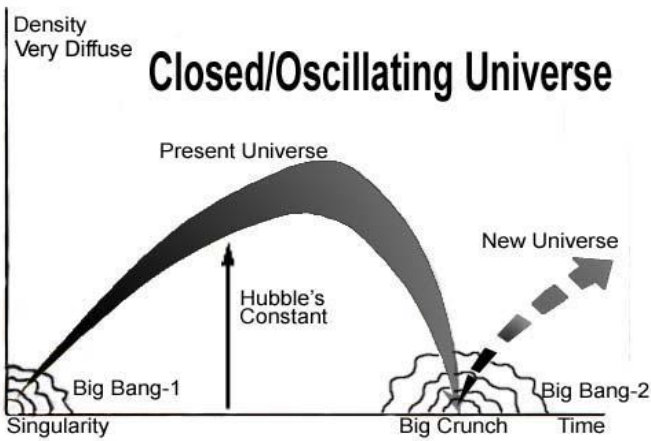


FIGURE 10: Oscillating Universe

"But it is also possible that expansion will be reversed by the pull of gravity, that all matter will collapse once again into a super-dense 'singularity', and that another universe will be born in another Big Bang- a cycle that could be repeated forever."

– *To the Edge of Eternity* by John Gribbin in *The Encyclopedia of Space Travel and Astronomy* edited by John Man

Alternatively, due to the enormous pressure and temperature, the rapidly contracting universe may bounce

back from the state of the Fireball, and a new universe could be born.

"For just as galaxies are combined by the attractive force of gravity the total mass of the whole universe provides an insistent tug on every galaxy and cluster of galaxies within the universe. As the universe expands out ward from the initial explosion of the Big Bang, the gravitational tug gradually decreases. But it is always present, and if there is enough matter, eventually gravity will overcome the expansion, and the universe will slow to a halt. The whole drama will then be played out in reverse. The universe will collapse faster and faster under the overwhelming pull of gravity until it is squashed into another fireball, perhaps then to bounce back out again."

– *To the Edge of Eternity* by John Gribbin in *The Encyclopedia of Space Travel and Astronomy* edited by John Man

Therefore, after collapse, the universe may be reborn from either the Big Crunch or a Big Bounce. This is known as the Cyclic Model of the universe.

4. **The Quran's Model of the Universe**

Thus far, we have discussed that the Quran supports the cyclic universe model, as it suggests the presence of primordial matter, such as dust and asteroids (lands), in the early universe:

> "Do not the unbelievers see that the Skies and Lands were joined together before We clove them asunder…" [Al Quran 21:30]

This suggests that the present universe originated from a Big Bounce, a scenario where heavier elements, at least up to

silicon, could have existed, forming lands (dust and asteroids).

> "He is the One Who created for you what was in the assembly of lands (fil-ardi-jamian). Then He turned to the Sky and made them into Seven Skies. And of all things He had perfect knowledge" [Al Quran 2:29]

In the above verse, "the assembly of lands" (*fil-ardi-jamian*) refers to the Fireball, where all matter produced in the preceding cosmic cycle assembled.

The Fireball is defined as a state of the universe less than a million years before or after the Big Bang. Due to immense pressure and temperature, the rapidly contracting universe experienced a Big Bounce and restarted as a seven-sky-universe.

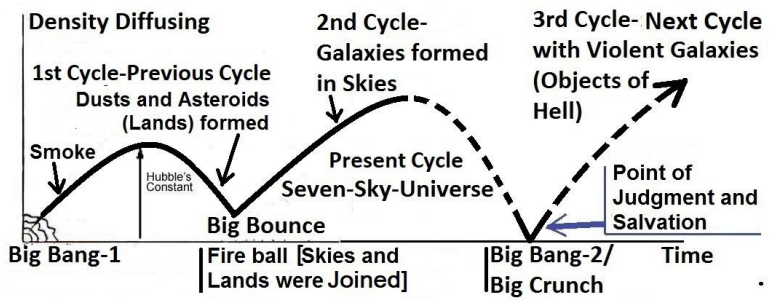


FIGURE 11: The Quran's Model of the Universe

Elements exceeding silicon in atomic weight, including gold, silver, and iron, originated within the stars of the current cosmic cycle. Certain massive stars underwent supernova explosions, dispersing these elements into space. Such dispersed elements then enabled the formation of stellar systems, analogous to the solar system.

"It is during supernova explosion that the creation of the more complicated elements like uranium is thought to occur…These elements went into the mixture from which the Sun and the Solar system were later formed"

– *The Life and Death of Stars* by Geoffray Bath in The Encyclopedia of Space Travel and Astronomy edited by John Man.

5. **Creation of the Earth**

Scientists believe that the Earth formed from many small solid particles left over from the creation of the Sun. The main ingredients were iron and silicates, along with small amounts of other elements.

The following four elements make up over sixty percent of the Earth: one is silicon, and the other three are lighter than silicon.

- Silicon – 15.1 %
- Oxygen – 30.1 %
- Magnesium – 13.9 %
- Aluminum – 1.4 %
- **Total – 60.5 %**

Silicon and the elements lighter than silicon were created in the contracting universe of the preceding cycle.

After the Big Bounce, the current cycle began, and the universe became an expanding seven-sky universe. The skies, being waves of space, helped accumulate matter into massive conglomerates, which eventually formed galaxies by creating stars.

In the current cycle, elements heavier than silicon formed in the stars due to fusion reactions in their hot cores and supernova explosions. These explosions scattered the elements into space. The elements heavier than silicon were

brought from these sources and put down on Earth, as the following verse states:

> And He placed therein firmly set mountains and blessed therein from above it and determined therein its nourishment in four days equal; for those who ask.
> [Al Quran 41:10]

The elements brought from above included massive amounts of iron, making up 32.1% of the Earth.

> "And we sent down the iron, wherein there is strength and many benefits for the people." [Al Quran 57:25]

The iron core of the Earth maintains the planet's internal temperature and contributes to the formation of mountain ranges.

Rest 7.4% (100 – 60.5 – 32.1 = 7.4) was as under:

- Sulfur – 2.9 %
- Nickel – 1.8 %
- Calcium – 1.5 %
- Trace amounts of other elements – 1.2 %
- **Total 7.4 %**

Living creatures require many elements heavier than silicon in their bodies. Some of these elements (7.4%) provide nourishment to living creatures, as the verse above (41:10) states: *'...and determined therein its nourishment in four days equal...'*

Probably, the Earth captured some short-lived radioactive elements during its formation. So, the matter quickly heated up, and a large part of the Earth melted. As a result of the melting, liquid iron sank to the core, while lighter compounds

of silicon, carbon, sodium, magnesium, and other materials floated to the surface, forming the mantle and primitive crust.

"At some point, the release of energy by radio-active elements must have melted a large part of the Earth since this is the only way known for the separation of the original body of uniform composition into a core and a mantle. A similar process occurs when impure iron is melted in a steelwork and the nonmetallic parts separate out to from a low-density slag, which floats to the surface. It was in this way that the primitive crust was formed."

– *Planet Earth* by Peter Owen in The Encyclopedia of Space Travel and Astronomy edited by John Man.

The short-lived radioactive elements decayed long ago. It is believed that long-lived radioactive elements, such as uranium, thorium, and others, are still present in the Earth, maintaining the temperature in its core at four thousand degrees Celsius.

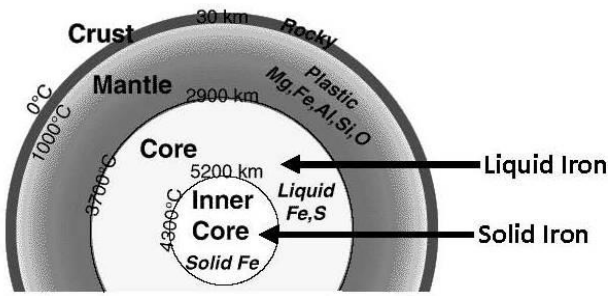


FIGURE 12: Earth's Interior

6. **An Earth for Adam and Eve**

The Earth is a unique planet, a fact that becomes clear when we compare it with the other planets in the Solar System. Mars may be the most similar to Earth, but it still does not

appear to be a planet capable of supporting even the simplest microorganisms. There is no liquid water on Mars. It has clouds, but these clouds are made of sulfuric acid.

The Earth expels interior heat through volcanoes, but Mars does not have such a system. If the surface of Mars is thin, it radiates interior heat across its entire surface; if it is thick, the planet would likely explode after long intervals to expel the interior heat.

The craters from meteor impacts are evenly distributed across the surface of Mars, indicating that the planet has not changed in the last 500 million years or so. In contrast, during this time, Earth has undergone massive changes to become suitable for creatures like us.

When Adam and Eve descended, the Earth was ready to receive them with suitable lands, rivers, plants, and animals:

> "And it is He who spread out the land and set thereon mountains standing firm and rivers; and of the all fruits He made in it—pairs two. He draws the night as a veil over the Day. Behold, verily in these things there are signs for those who consider!"
>
> [Al Quran 13:3]

The verse above sequentially addresses a few matters, listed below, to explain how the Earth has been made suitable for us.

a. Continental Drift
b. Formation of Mountains
c. Formation of Rivers
d. Production of Fruits
e. Rotation of the Earth
f. Creation of Darkness

The points are discussed below by dividing the Verse in six parts.

6a. **Part 1 of the Verse (13:3): Continental Drift**

"And it is He who spread out the land…"
[Al Quran 13:3]

One can observe the shapes of the continents on a globe. It seems that the continents would fit together nicely if they were brought closer to one another. For example, the bulge of South America fits perfectly into the bight of Africa.

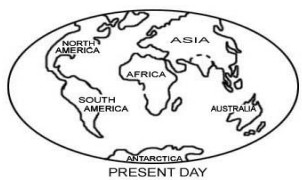


FIGURE 13: Continents

Thus, it is clear that the continents were once joined together and have since drifted apart.

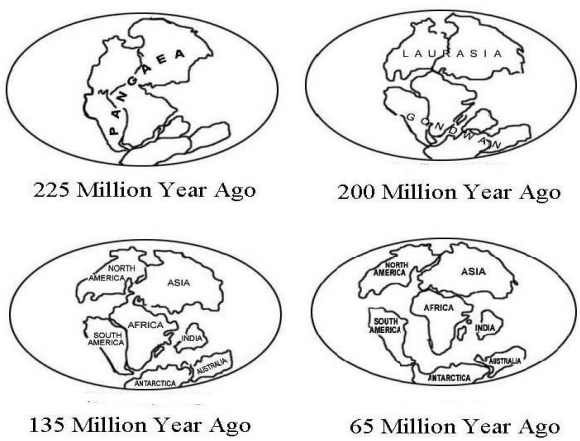


FIGURE 14: Continental Drift

British philosopher Francis Bacon noted the continental drift in 1620. Many scientists, such as Alfred Wegener, Professor Henry, Frederick J. Vine, and Drummond Matthews, contributed to the subject. Ultimately, a theory known as the 'Theory of Plate Tectonics' was developed.

The Earth's surface is divided into huge tectonic plates, 80 to 400 km thick, made of rock. These plates move atop the soft mantle (asthenosphere). As the plates shift, the continents are carried away from one another.

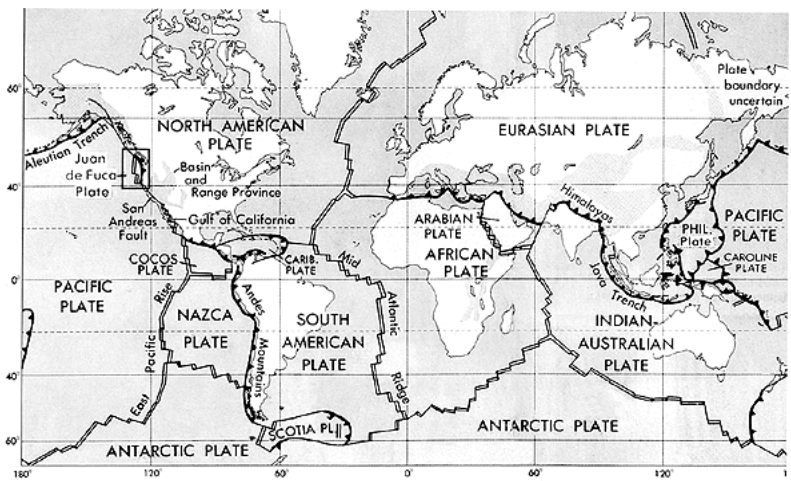


FIGURE 15: Techtronic Plates

Major tectonic plates include the Eurasian plate, Indian-Australian plate, Philippine plate, Pacific plate, Juan de Fuca plate, Nazca plate, Cocos plate, North American plate, Caribbean plate, South American plate, African plate, Arabian plate, and Antarctic plate. These plates consist of smaller sub-plates.

Continental drift has made the Earth more suitable for life. The central region of the undivided landmass (Pangaea) was far from the ocean, but the central regions of the continents are now closer to the oceans. As a result, the overall length of coastlines has increased.

6b. **Part 2 of the Verse (13:3): Formation of Mountains**

> "And it is He who spread out the land, and set thereon mountains standing firm…" [Al Quran 13:3]

The continental drift and the formation of mountain ranges are closely related.

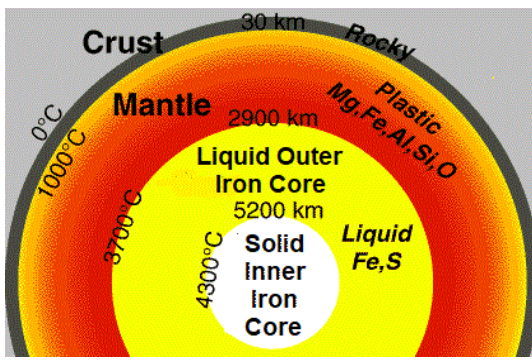


FIGURE 16: Earth's Interior

The interior of the Earth is divided into four prominent layers.

- The outermost layer of the Earth is called the Crust. The Crust is a mixture of organic and inorganic compounds. Its depth is 30 to 40 km on land and approximately 10 km on the seabed.

- The layer beneath the Crust is called the Mantle. The Mantle is composed of compounds containing magnesium, iron, calcium, aluminum, silicon, oxygen, and other elements. It is approximately 2,920 km wide.
- Below the Mantle is the Core, which is divided into the Outer Core and the Inner Core. The Outer Core is approximately 1,800 km wide and consists of liquid iron with about 5% nickel. The Inner Core is approximately 1,600 km in diameter and is made of solid iron

The properties of the Mantle change at a depth of about 100 km. The Mantle and the Crust above this depth together form the Lithosphere. The Lithosphere is rigid but is broken into seven major slabs and several smaller ones (tectonic plates).

The mantle below this depth is called the Asthenosphere. The slabs move about on the Asthenosphere.

The temperature at the center of the Earth is approximately 4,000 degrees Celsius. It decreases steadily toward the surface. On the surface, the heat flow is approximately 0.06 watts per square meter.

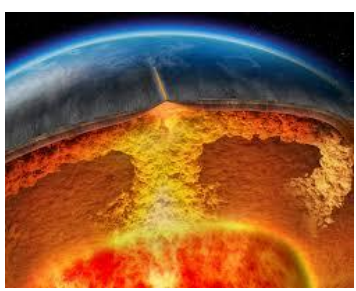


FIGURE 17: Convection Current

The heat flowing toward the surface produces convection currents in the Asthenosphere. These currents drive the movement of the tectonic plates. Although the Asthenosphere is solid, it can flow at a sufficient rate to push the slabs.

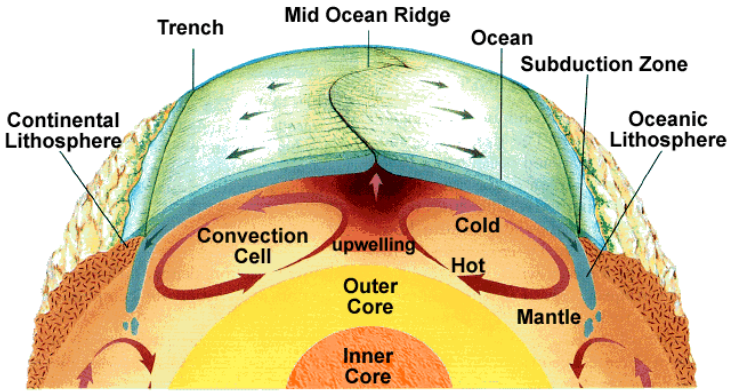


FIGURE 18: Subduction

The thermal energy released by radioactive elements maintains the temperature of the Core. This energy heats the magma near the Outer Core. The hot magma rises, transferring heat to the Crust; and as it cools, it becomes denser. The cooler magma then sinks back toward the Core. This cycle is repeated continuously. It causes the oceanic crust to spread apart at the mid-ocean ridge. As a result, the oceanic lithosphere is subducted beneath the continental lithosphere at the trenches.

Subduction causes volcanic eruptions and forms mountain ranges, such as the Andes. The Andes began forming about 65 million years ago when the Pacific Plate started sliding beneath the South American Plate.

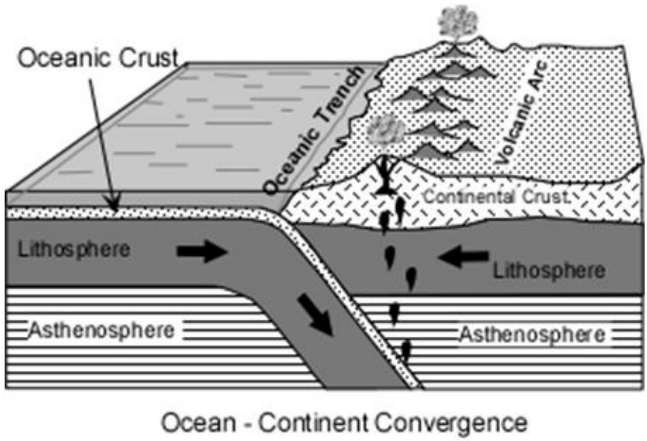


FIGURE 19: Subduction and Formation of Mountain Range

Where two tectonic plates collide and neither is pushed under the other, the plates crumple and form mountain ranges, such as the Himalayas. The Himalayas are formed as the Indian (Indo-Australian) plate pushes into the Eurasian plate.

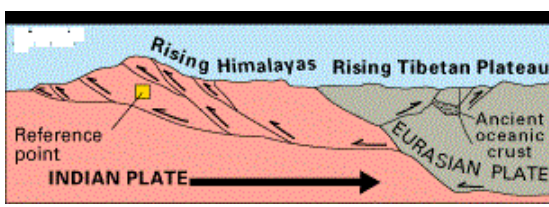


FIGURE 20: Formation of Himalayas

When plates collide under the sea, they create volcanic islands.

Therefore, the continental drift and the formation of mountain ranges are closely related. So, the Quran mentions these two aspects in the same verse.

"And the land We have spread out, set thereon firm mountains, and produced therein all kinds of things in due balance" [Al Quran 15:19]

Mountains are firm because they are deeply rooted in the Earth's crust.

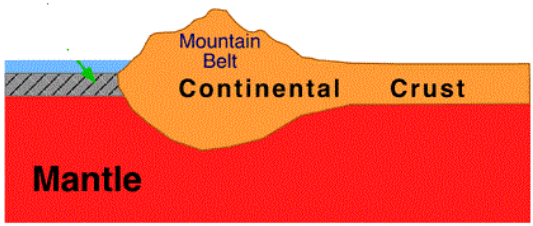


FIGURE 21: Mountains, Firm and Immoveable

Moreover, the continuous pressure from colliding tectonic plates sustains the high mountains; otherwise, these heavy masses would sink into the Earth over time. But they stand firm, as the verse under discussion also says: *And it is He who spread out the land, and set thereon mountains standing firm…*

Thus, continental drift is related to produce and sustain 'firmly standing high mountains.

6c. **Part 3 of the Verse (13:3): Formation of Rivers**

"And it is He who spread out the land, and set thereon mountains standing firm and rivers…"

[Al Quran 13:3]

The rivers can originate from the 'high' mountain ranges only.

The temperature at the top of the mountains is lower than the temperature at sea level. Due to the cool air, clouds form water particles. Additionally, mountainous terrain creates turbulence in the air, which breaks up the clouds. The broken clouds collide and mix the water particles with each other, resulting in raindrops heavy enough to fall to the ground. Therefore, there is usually precipitation in mountainous areas, and rivers are formed. If there were no mountains, the clouds would remain in the sky like clumps of fog.

Moreover, the major mountain ranges on Earth are roughly elongated from north to south. As a result, these high mountain ranges can intercept clouds flowing along the 'main cloud flow line' that runs east to west along the Equator. The mountain ranges then divert the intercepted clouds into the continents (see figure below). Otherwise, much of the cloud would continue flowing along the equatorial belt. Is this not the work of a Designer?

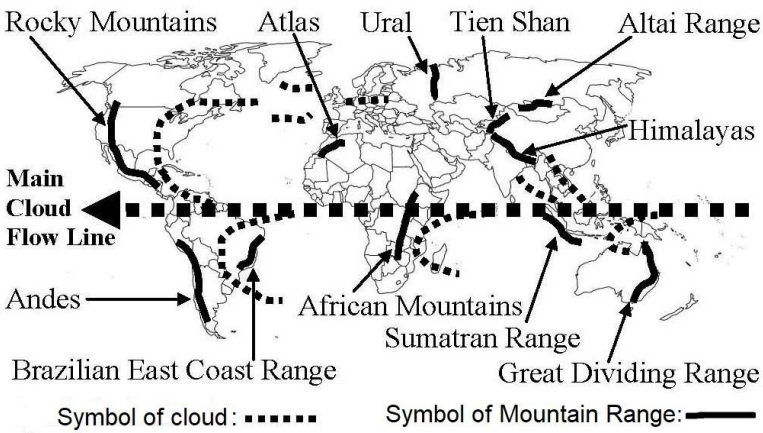


FIGURE 22: Flow of Cloud

In the figure above, the mountain ranges are represented by continuous lines, while the flowing clouds are shown by

broken lines. This illustrates how mountain ranges divert clouds into the continents.

The list of major mountain ranges is given below:

- Andes, South America: 7242 km long.
- Rocky Mountains, North America: 6035 km.
- Brazilian East Coast Range: 3058 km.
- Atlas Mountain Range, Africa: 2500 km.
- Himalayas + Tien Shan + Altai: 2253 km + 2012 km + 3862 km = 8127 km.
- Great Dividing Range, Australia: 3621 km.
- Sumatran Range: 2897 km.

Rainwater moves into the continents, raising the level of groundwater around the world.

> "Then let man look at his food: For that we pour forth water in abundance, and We split the land in fragments and produce therein corn and grapes and nutritious plants, and olive and dates and enclosed gardens dense with lofty trees, and fruits and fodder; for use and convenience to you and your cattle."
>
> [Al Quran 80:26-32]

The above verses are talking about hilly terrains and deserts, which produce crops such as corn, grapes, olives, dates, and enclosed gardens (oases). So, the verses are not referring to the regular rainfall water found in low-lying wetlands. Instead, the verses are referring to groundwater that slowly flows through the permeable layers of the Earth, aiding the growth of trees in these regions.

The water flows due to the layered structure and the difference in ground pressure, with mountains playing a vital role.

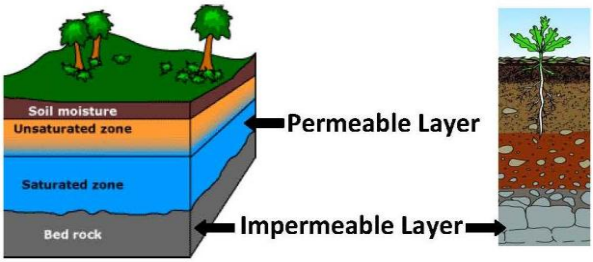


FIGURE 23: Ground Water

The permeable layer is made of fractured stones, gravel, and sand, as the verse state, *"…and We split the land in fragments…"* This layer is found throughout the world, typically at depths of up to 750 meters. Even when the topsoil is dry, there may still be a significant amount of groundwater in the permeable layer. The estimated total volume of the water is equivalent to a 55-meter thick layer spread over the entire surface of the Earth.

6d. **Part 4 of the Verse (13:3): Production of Fruits**

> "And it is He who spread out the land, and set thereon mountains standing firm and rivers; and of the all fruits He made in it—pairs two (Double Pollination)…" [Al Quran 13:3]

I have translated part of the verse word-for-word. Normally, it is translated in a deviated form, as*: "and the fruit of every kind He made in pairs, two and two."* The deviated translation suggests that there are male-apples and female-apples, but there is no such thing as male-apple and female-apple. Therefore, I realized that there is a problem with the translation. I looked for a word-for-word translation and

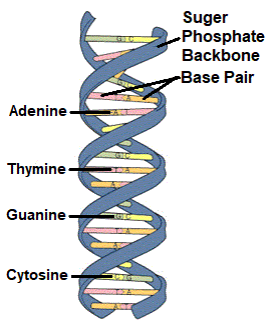
found that it is not about male-apples and female-apples. Actually, in the Quran, the word 'pairs' normally refers to 'double helix DNA molecule.'

To confirm that 'pair' (*zawgin*) normally refers to 'double helix DNA molecule,' the verses from different chapters that mention 'Pair' are discussed below. It should be noted that these verses do not make sense in straightforward translations. As a result, translators often render 'Pairs' as 'sexual couples,' leading to deviated interpretations. My translations, however, are straight word-for-word translations.

> "…And He scattered through it beasts of all kinds—We send down rain from the sky—all from Noble Pair (*Min kullay zawgin kareem*)" [Al Quran 31:10]

> "Do they not look at the Earth, how many we produced in it—all from Noble Pair (*Min kullay zawgin kareemin*)?" [Al Quran 26:7]

Below is a picture of the Noble Pair. It is a double helix DNA molecule made of two linked strands wound around each other.



(Min kullay zawgin kareem)

FIGURE 24: Double Helix DNA Molecule (the Noble Pair)

All living creatures, from single-celled microorganisms to giant blue whales, are made up of double helix DNA molecules.

A human double helix DNA molecule is about six feet long. It remains coiled in the form of chromatin, which is found in the nucleus of a cell.

The DNA molecule contains about 23,000 genes, which account for only 2% of the DNA. The function of the remaining 98% is not yet clear. A gene is a segment of DNA that codes for a specific function. For example, a gene codes for insulin, which helps the body regulate the amount of sugar in the blood.

With only about 20 types of amino acids, the genes in a double helix DNA molecule can produce over 1,000 types of proteins needed by the body. It can also produce over 2,000 types of enzymes. Genes are the basic units of genetics.

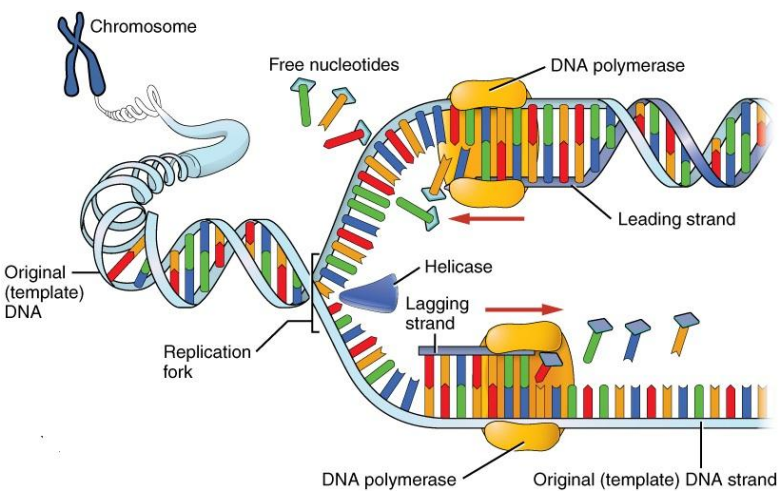


FIGURE 25: DNA Replication (*Zawgin Baheej*)

In DNA replication, the double helix unwinds, and its strands separate. One strand acts as a template for the synthesis of the new strand. Bases are matched to form the new partner strand, which is produced from the nucleotides available in the protoplasm. The old strand attracts the new strand to form a new double helix DNA molecule.

So, in the Quran, it is also referred to as 'Attractive Pairs' (*zawjin baheej*):

> "And the earth, We have spread it out, and set thereon mountains standing firm, and grown therein every kind from Attractive Pair (*zawgin baheej*)"
>
> [Al Quran 50:7]

There are 46 double helix DNA molecules in the nucleus of a human cell. After these molecules replicate, the cell divides.

DNA code is the blueprint of life. A human body develops from a single cell (zygote). The genome code dictates what each cell becomes: which cells become bone cells, muscle cells, brain cells, and so on. It does not create nerve cells in the hair or hair cells in the nerve. There are over 250 types of cells that make up our body. Each type of cell has specific programs needed to function. If the programs of genome expression were written in books, the stack of books would be higher than a mountain.

A human child is born with more than a hundred trillion cells. Can it be believed that the entire process of creation is guided by the double helix DNA molecules found in the nucleus of a cell, which are not even visible to the naked eye? In the verses above, they are referred to as the 'Noble Pair' (Zawjin Kareem). It truly performs an incredible job.

The following verse mentions 'cattle' and 'ships.' It states that both are created from 'pairs.' The only 'pairs' in the world

from which a horse or the wood for an ocean-going ship can be created are double helix DNA molecules.

> "That has created pairs in all things, and has made for you ships and cattle on which ye ride"
>
> [Al Quran 43:12]

Chemically, the genome of a plant and the genome of an animal are the same, but their codes differ, making one genome a plant and the other a horse.

All living creatures, from single-celled amoebas to humans, are created from double helix DNA molecules (Pairs):

> "Glory to God, Who created all things that the Earth produces (plants and animals) as well as their own kind (humans) and things of which they have no knowledge (microscopic creatures) from Pairs (double helix DNA molecules)" [Al Quran 36:36]

However, a virus does not have a double helix in its DNA. This is also clarified in the verse above by the phrase *"all things that the earth produces."* A virus is not produced by the earth; it is produced only in the host.

Viruses can exist outside the host for a short time, but they need to be inside a host to replicate. The viral genomes do not encode all the proteins and RNAs needed for replication. The virus membrane fuses with the host cell membrane, allowing viral proteins to mix directly with the host cell proteins in the cytoplasm, where replication occurs.

Moreover, a virus is a nonliving entity. The verse above is referring to living creatures.

> "The Creator of the Skies and Lands: He has made for you pairs from among yourselves, and pairs among cattle; by this means does He multiply you; there is nothing whatever like unto Him, and He is the One that hears and sees." [Al Quran 42:11]

In the above verse, cattle are mentioned only to clarify that the verse is not referring to married couples. Cattle do not marry. The pairs are created from among us, as the verse says: *"He has made for you pairs from among yourselves…"* And the pairs are the means of reproduction, as the verse says: *"…by this means does He multiply you."*

Therefore, in this verse, the "Pair" means Haploid Chromosomes that are available in a reproductive cell. Each Haploid Chromosome contains one double helix DNA molecule (Pair). The Diploid Chromosomes are made in the zygote through the fusion of sperm and ovum.

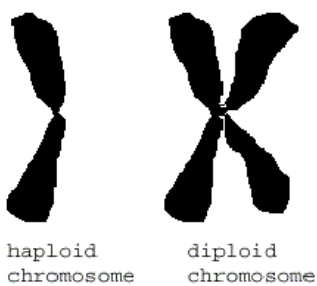


FIGURE 26: Chromosome

Now we can go back to the main discussion: *"…and of the all fruits He made in it—pairs two"*

A pollen grain is haploid—it possesses half of the DNA needed to form the plant. It combines with the other half of the DNA in the egg cell to form the zygote. In plants, this process is similar to sexual reproduction in animals.

But, a second fertilization is needed in plants to produce fruits. Double fertilization is unique to plants. In double fertilization, two sperm cells fertilize the cells in the plant ovary.

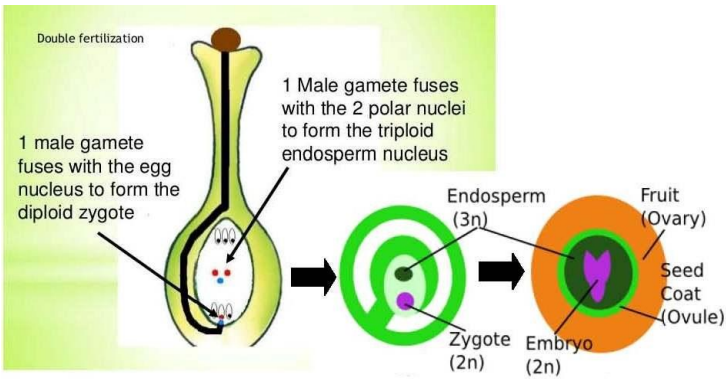

Double fertilization
1 male gamete fuses with the egg nucleus to form the diploid zygote
1 Male gamete fuses with the 2 polar nuclei to form the triploid endosperm nucleus
Endosperm (3n)
Fruit (Ovary)
Seed Coat (Ovule)
Zygote (2n)
Embryo (2n)

FIGURE 27: *and of the all fruits He made in it—pairs two.*

After a pollen grain sticks to the stigma of the pistil, one haploid cell divides into two haploid sperm cells. One sperm (n) fertilizes the egg cell (n) and produces a zygote (2n), which develops into an embryo. The other sperm cell fuses with two cell nuclei to produce a triploid cell (3n). This triploid cell develops into endosperm, which serves as the food supply for the embryo. In this way, edible fruits are produced. Thus, the verse says: *"...and of the all fruits He made in it—pairs two"*.

How is the production of fruit related to the spread of lands (continental drift)?

It is related to the supply of water. If we examine the evolution of flowering trees, we find that they appeared around 73 million years ago, with the advent of pollinating insects (such as bees). This coincided with the drifting of the continents and the formation of high mountain ranges, which

diverted clouds from the equatorial belt, leading to rainfall and the creation of rivers. It raised the level of groundwater. The rise of groundwater was crucial for creation of the large trees that produce fruit.

The production of fruit-bearing trees is related to continental drift in other ways as well:

> "It is He Who has spread out the land for creatures. Therein are fruit and date palms, producing spathes. Also corn with leaves and stalk for fodder, and sweet-smelling plants." [Al Quran 55:10-12]

6e. **Part 5 of the Verse (13:3): Rotation of the Earth**

> "And it is He who spread out the land, and set thereon mountains standing firm and rivers; and of the all fruits He made in it—pairs two (Double Pollination); He draws the night as a veil over the Day…" [Al Quran 13:3]

The rotation of the Earth is mentioned indirectly in the Quran, as people in ancient times were firmly convinced that the Earth was stationary. It would have been too much of a burden to convince them that the Earth was rotating. Therefore, it is mentioned in an indirect way. The Earth rotates, and the 'day side' gradually transitions into the 'night side,' causing a veil of darkness to cover the day.

The production of fruits is clearly related to day and night, as trees cannot grow without the cycle of both. However, the rotation of the Earth may also be connected to other aspects of the verse, such as continental drift, the formation of high mountains, and rivers.

The widely accepted theory suggests that the convection currents in the mantle drive the movement of tectonic plates,

as discussed above. However, there is also a concept that proposes the forces generated by the Earth's rotation, along with the tidal forces of the Sun and the Moon, as the causes of continental drift. So, the rotation of the Earth may have been mentioned contextually in the verse.

> "And it is He who spread out the land and set thereon mountains standing firm, and rivers; and of all fruits He made in it—pairs two; He draws the night as a veil over the Day. Behold, verily in these things there are signs for those who consider!" [Al Quran 13:3]

This is a simple verse for simple believers, but it is embedded with the signs of creation to counter any challenge.

7. **The Coach and the Canopy**

The Quran calls upon people to recognize the existence of a Guardian Lord by observing the earth as a couch and the sky as a canopy. And the same canopy-sky brings rain.

> "O you people! Adore your Guardian-Lord Who created you and those who came before you, that you may become Al-Muttaqun, Who has made the land your couch and the skies your canopy and sent down rain from the skies and brought forth therewith Fruits for your sustenance—then set not up rivals unto Allah when you know" [Al Quran 2: 21-22]

If one observes these with an open mind, one will recognize them as special creations of Allah, designed to make the Earth suitable for us.

7a. **The Land has been made a Couch**

The above verses say that the land has been made a Couch: *"…Who has made the land your couch..."*

For billions of years, the Earth has been producing living creatures. The active nature and prolonged accumulation of organic decay have contributed to the formation of the soft soil crust.

Pangaea split apart, forming the continents and creating the high mountain ranges that gave rise to the rivers.

The raining sky revives the land again and again, lifting the groundwater to make the Earth fertile with soft soil crust.

Thus the land has been made a couch.

7b. **The Sky has been made a Canopy**

The above verses say that the skies have been made canopy: *"…Who has made the land your couch and the skies your canopy…"*

7b(1). The Earth is protected from the solar wind by its magnetic field. The stream of energetic charged particles emanating from the Sun is known as the solar wind. Earth's magnetic field deflects most of these charged particles, creating a protective canopy in the sky.

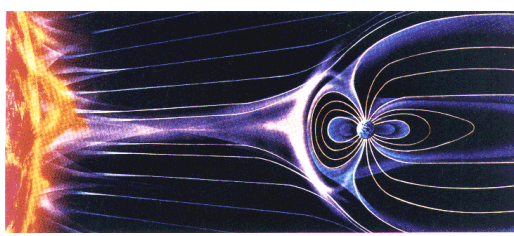


FIGURE 28: Earth's Magnetic Field deflecting Solar Wind

7b(2). The atmosphere regulates temperature through the greenhouse effect.

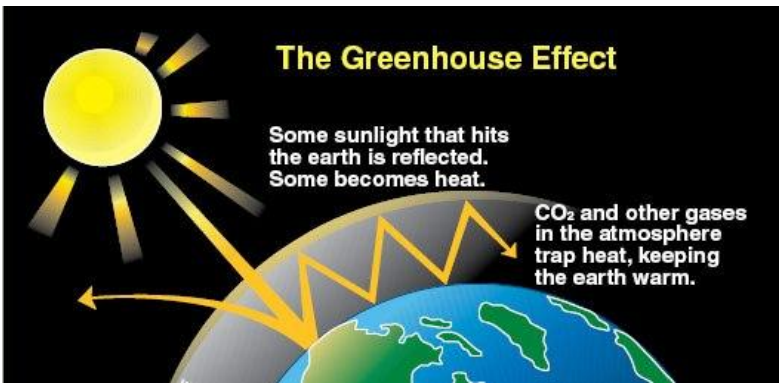

The Greenhouse Effect
Some sunlight that hits the earth is reflected. Some becomes heat.
CO_2 and other gases in the atmosphere trap heat, keeping the earth warm.

FIGURE 29: Green House Effect

Carbon dioxide in the upper layers of the atmosphere traps heat, helping to keep the Earth warm. If the amount of carbon dioxide were higher than it currently is, the Earth would overheat. If it were lower, the Earth would freeze. The Earth has a system to maintain the correct balance of carbon dioxide in the atmosphere.

So, the sky has been made a canopy.

7b(3). The atmosphere protects us from harmful radiation.

Only visible light and infrared light reach the Earth's surface. Harmful radiations, such as X-rays and ultraviolet rays, are absorbed or reflected by the thermosphere, mesosphere, and stratosphere.

Thus, the sky acts as a protective canopy.

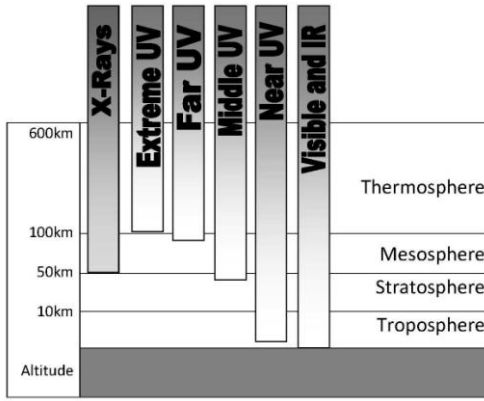


FIGURE 30: Earth's Atmosphere

7c. **Formation of Clouds**

The upper layers of the atmosphere act as a canopy, while the lower layers cause rain, as the verses simultaneously describe: *"…Who has made the land your couch and the skies your canopy <u>and sent down rain from the skies</u>…"*

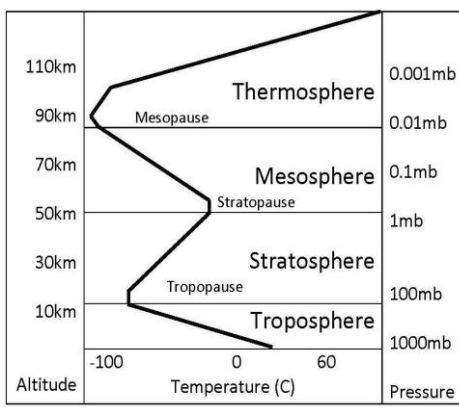


FIGURE 31: Temperature Curve

Clouds form and float primarily in the troposphere. In this layer, the temperature of the atmosphere rapidly decreases, leading to the formation clouds.

The towering clouds dissipate at a height of 12 km. The layers beyond that height are meant to protect us from harmful radiation, and much of the water vapor is prevented from rising further.

There is no scientific explanation for why the rise and fall of temperature is so peculiar in different layers of the atmosphere; it is simply nature, designed and sustained by God:

> O you people! Adore your Guardian-Lord, Who created you and those who came before you that you may become Al Muttaqun, Who has made the land your couch and the skies your canopy and sent down rain from the skies and brought forth therewith Fruits for your sustenance—then set not up rivals unto Allah, when you know. [Al Quran 2: 21-22]

8. **Creation of Life on Earth**

The progression of living organisms shows that they evolved over eons of time, from lower to higher forms. The concept of evolution was presented by Ibn Khaldun (1334–1406) in his book *Kitab al-Ibar*. It later became known in Europe as the 'Mohammedan Theory of Biological Evolution.'

Many scientists carried the theory forward. In the 19th century, Charles Darwin argued that evolution occurs through natural selection, as he expressed: “As many more individuals are produced than can possibly survive.” The concept was succinctly summarized by Spencer’s phrase:

"Survival of the fittest". Simply put, many species evolve naturally; the fittest survive, reproduce, and continue.

Darwin is called the Father of the 'Modern Theory of Biological Evolution.' However, he could more accurately be called the Father of the 'Atheistic Theory of Biological Evolution' because he argued that evolution occurs through natural selection, not by the involvement of God.

Darwin's argument has been proven wrong in the laboratory. Living creatures are expressions of genome codes, the proven handiwork of God. These monumentally complex codes of interdependent creatures cannot modify on their own in a positive direction.

So, biological evolution is true, but the theory of natural selection is wrong. Evolution is guided by God, and He says that humans are stand-alone creatures.

Modern scientific disciplines have firmly established the theory of biological evolution. It shows that all living creatures have descended from bacteria-like microorganisms that originated on the ocean floor more than three and a half billion years ago. These early organisms had the same double helix DNA molecule that we have today, though the genetic codes were different.

> "Glory to God, Who created all things that the earth produces, as well as their own kind, and things of which they have no knowledge from Pairs (Double Helix DNA Molecule)" [Al Quran 36:36]

8a. **The Instrument of Evolution**

A double helix DNA molecule is a long polymer. A human DNA molecule is six feet long. It remains coiled in the form of chromatin, which further condenses to form chromosomes during cell division.

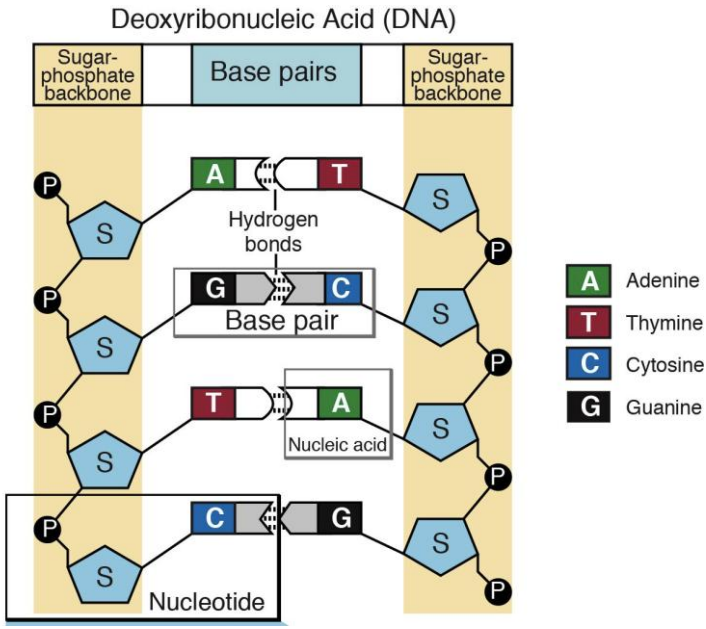


FIGURE 32: Double Helix DNA Molecule

A gene is a part of DNA that encodes a function. There are about 23,000 genes in a strand of human DNA. Surprisingly, the DNA of a chicken has the same number of genes (23,000). It is the minor variations in these genes and their switching on and off during the formation of the body that determine the kind of animal it will produce.

DNA is like a huge factory with many machines. It is the Body Plan Genes that determine which machines will run, for how long, and what will be produced—a gorilla or a monkey. If the hand-making machines run for a long time, they produce the hand of a gorilla; if they run for a short time, they produce the hand of a monkey. The genes are switched on and off accordingly.

It is the same genes that work in plants, horses, peacocks, and fruit flies, yet they produce widely different results. It is hard to differentiate the embryo of a human from that of a chicken. As they grow, their features become evident. The 'body plan gene' directs when and where the head will grow—whether it will be a chicken's head or a human's head; where the legs will grow—whether they will be a chicken's legs or a human's legs; where the wings/hands will grow, and so on.

Another set of DNA determines body patterning, such as the blotches and spots. Scientist Sean B. Carroll suggests how these genes are used to create diverse creatures. There are sections of DNA called 'switches.' The switches are not genes; they do not produce things like hair, cartilage, or muscle, but they turn on and off the genes that do. Thus, they choreograph the blotches and spots on the animal's body.

A particular 'body plan gene' is called the Hox gene. It is at the top of the chain of command. It gives orders that cascade through the developing embryo, activating an entire network of switches and genes that form the body parts. Hox genes are critical to the shape and form of a developing creature.

Thus, there are genes that make the parts of our body, such as hair, cartilage, and muscle. There are switches that turn them on and off. And there are Hox genes that give commands for coordination.

Therefore, the origin of a whole new structure in evolution does not involve the origin of a new gene or a completely new genetic recipe; instead, the old genes can be reconfigured to create a new species.

The first single-celled creature had the same DNA double helix molecule that we have today. A new form of life must have a new code in the form of information inscribed in the

backbone of the DNA molecule. Such monumentally complex code cannot modify on its own.

There are clearly defined periods when these modifications took place. The Cambrian Explosion was an explosion of biological forms, but it was also an explosion of biological information. And we know what it takes to generate information in a computer.

So, evolution is not a continuous process and did not occur as a matter of survival of the fittest. A super-intelligent creator designed the double helix DNA molecule and guided evolution by modifying the genomic codes.

8b. **The First Living Creature**

Allah evolved the universe from a tiny state of unity. He also evolved the giant blue whales from a tiny single-celled creature that He created in the water (ocean floor):

> "Do not the unbelievers see that the 'Skies and Lands' (Universe) were joined together, before We clove them asunder? We made from water every living thing. Will they not then believe?" [Al Quran 21:30]

Allah designed the laws and the initial configuration of the universe so that it would evolve as desired. However, the design could not contain the information needed to create the genome of the first living creature. It is too complex and vast [a genome is an organism's complete set of DNA, including all of its genes].

The DNA structure capable of reproducing another similar creature is so complex and contains such vast amounts of information that it negates the probability of accidental creation—the probability is 1 in $10^{340,000,000}$.

Thus, the first genome was a special insertion by God. Subsequently, He modified it through the angels to create the higher species.

8c. **Reason of Evolution**

The Quran does not state that Allah created this vast universe with a single command of 'Be.' Instead, it mentions that He created it over six periods of time, each of which was a long period. He adopted the best possible way to create. One of His names is Evolver.

> "The One Who made good everything He created,
> and He began the creation of man with clay."
>
> [Al Quran 32:7]

The above verse explains the reason for evolution: it was to perfect everything He had created. In other words, it was to evolve the creatures into higher forms. For example, He created the horse, but it was only 20 cm high. He made it large by modifying its genome. Now, it can carry a human.

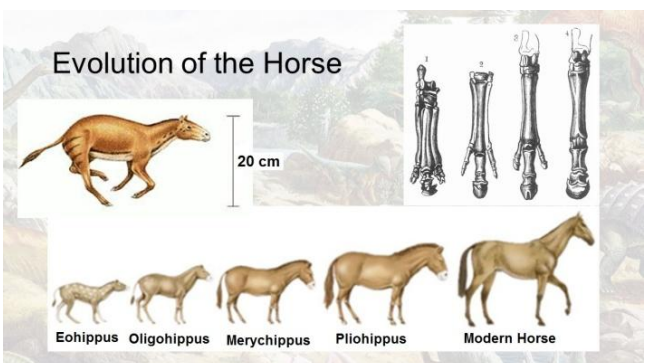


FIGURE 33: *Made good everything He created*

The reptiles were the dominant creatures of the Mesozoic Era, so the horses had to be small to hide in the undergrowth and small holes. When the Age of Mammals (Cenozoic Era) began about 65 million years ago, evolution was directed toward making the Earth suitable for Adam. The reptiles were erased, and the horses were gradually grown larger, step by step.

8d. **"Be" and it is!**

Allah is ever-living. He was never in a hurry to create. The primitive Earth was not suitable for complex creatures, so He created tiny single-celled organisms that could survive and help make the Earth suitable for higher life forms. These were esteemed creatures that survived in the barren Earth.

There was no free oxygen in the atmosphere, so there was no ozone layer to protect the Earth from harmful ultraviolet (UV) radiation. The evolution of life was occurring in the water. Over time, free oxygen began to accumulate in the air, the ozone layer formed, and land-dwelling creatures appeared.

The continents drifted, mountains formed, rains replenished the groundwater, and fruit-bearing trees evolved. When the Earth became suitable, Allah created Adam separately, but with the same double helix DNA molecules (pairs):

> "Glory to God, Who created all things that the earth produces, as well as their own kind, and things of which they have no knowledge from Pairs (Double Helix DNA Molecules)" [Al Quran 36:36]

Why would an omnipotent God adopt a time-consuming process to make the Earth suitable for humans? He could simply say, 'Be,' and everything would be created instantly. To understand this matter, we must discuss the verses related to the command of 'Be.' Let's examine the following verses:

> "It is not befitting to God that He should beget a son. Glory be to Him! When He determines a matter, He only says to it, "Be", and it is." [Al Quran 19:35]

> "It is He Who gives life and death; and when He decides upon an affair, He says to it, "Be", and it is." [Al Quran 40:68]

The above verses indicate that before issuing the command 'Be,' Allah must first 'determine the matter' or 'decide upon an affair,' which means He must concentrate and plan the matter or affair. Only then does He say 'Be' for the intended object to come into existence. His plan and order must be deliberate; otherwise, the created thing would not be perfect.

His order materializes because the elementary subatomic particles are held in His hand of nafs, comprising the necessary force fields, such as quantum fields, gravitational force, dark energy (the force of expansion), and so on.

'Allah in form' resides in the Arsh. His nafs (main / composite soul) may include 99 known and unknown force fields (elementary souls / ruhs). He has extended 15 to 20 of these force fields, such as quantum fields, gravitational force, dark energy, and so on to create, sustain, and evolve the universes. These extended force fields together make His hands of nafs. He has infused (did istawa) the right hand of His nafs for this universe (Samawaat). The whole Universe is in the palm of His right hand of nafs. He has infused the left hand of His nafs for the Arsh. [Allah is discussed in detail in

Chapter-1 of my Tafsir, 'Scientific Tafsir of Zakaria Kamal,' available on the Internet as a free PDF.]

> “To Him is due the primal origin of the Skies and Lands; when He decrees a matter, He says to it: "Be", and it is.” [Al Quran 2:117]

Allah is the Creator, Sustainer, and Evolver from the level of elementary subatomic particles. So, when He commands, the intended elementary subatomic particles move to their destined points instantly, forming the intended object. It is His power in the created universe that ensures every inert thing is designed and sustained to obey His commands.

Once something is created, it can be easily reproduced. The Universe will collapse, and it will be created again. The revival will be easier because space is collapsing like a written scroll—information cannot be destroyed.

> “Is not He Who created the Skies and Lands (Universe) able to create the like there of? Yea, indeed—for He is the Creator Supreme, of skill and knowledge! Verily, when He intends a thing His command is, 'Be', and it is!" [Al Quran 36: 81-82]

But if something is very complex, like the human body, the command 'Be' is not enough, as the following verse says:

> She said: "O my Lord! How shall I have a son when no man has touched me?" He said: "Even so; God creates what He wills: When He has decreed a plan, He but says to it, “Be,” and it is! [Al Quran 3:47]

It is most likely that a cell of Mary was modified into a zygote and placed in her womb to create Jesus. Jesus took about nine months to form in Mary's womb.

Adam was created through the same process:

> The similitude of Jesus before God is as that of Adam; He created him from *turabin*, then said to him, "Be", and he was. [Al Quran 3:59]

In the above verse, 'turabin' means 'collection' (its root word, 'turab,' means 'soil,' but it can also mean 'to collect' or 'deposit'). Adam was created from the collection of DNA materials in a zygote.

In the case of Adam, Allah might have collected a zygote from an earthly animal. He made changes in the genome code to produce the zygote of a human. He placed the zygote into a test tube, made arrangements to supply nourishment, and commanded it to be. Thus, Adam came into being in due course of time.

Allah had to create the zygote of Adam personally, and then He commanded, 'Be,' when the zygote began to develop. It must have taken months for the child Adam to be born in the test tube.

Allah has created and designed the universe in such a way that every inert thing acts in accordance with His command. These things are devotedly obedient to Him. Upon the divine command “Be,” many angels and systems may also come into action, each playing its role in the process of creation.

9. **Three Torturous Undertakings of Allah**

Allah is the Creator—and being a Creator is not an easy task. Although Allah does not tire, He experiences hardship. The

following verse refers to three acts of creation, each described as a torturous undertaking:

> "He created you from a Soul Single (Nafsin-Wahidatin / a combination of known and unknown force fields), then created favorable Pairs (double helix DNA molecule), and He sent down for you of the cattle eight Pairs (double helix DNA molecules coded to form four pairs of domestic animals), He creates you in the wombs of your mothers—creation after creation—three tortures (on Allah). That Allah is your Lord; for Him is the dominion. There is no god but He. Then how are you turned away?"
>
> [Al Quran 39:6]

The verse above is often translated in a deviated form, as many are reluctant to accept that anything could be torturous for Allah. However, my translation is direct and word-for-word. According to the verse, the "Three Tortures" (*Zulumātin Thalāthin*) upon Allah were as follows:

1. Creation from a Soul Single *(Nafsin-Wahidatin)*
2. Creation of the Favorable Pair (double helix DNA molecule)
3. Creation in the Mother's Womb

These tortures are specific to the creation of human beings. Allah has created many other creatures as well.

The Three Tortures are discussed below. Each of them represents a profound and weighty affair.

9a. **The First Torture – Creation from a Soul Single** ***(Nafsin-Wahidatin)***

The Universe was created from a huge Soul Single (Nafsin-Wahidatin) provided by Allah. He provided the Soul from His own body.

A ruh (an elementary soul) and a force field can be seen as the same thing. It functions as a command of God, operating invisibly but effectively, manifesting His will within creation.

Two or more ruhs (elementary souls) combine to form a nafs—a composite soul. A nafs is what sustains and governs a system. For example, an atom is sustained by three fundamental force fields: the magnetic force field (a ruh), the strong nuclear force field (a ruh), and the weak nuclear force field (a ruh). Together, these three forces form the nafs of an atom.

The Nafsin-Wahidatin (a Soul Single) was a vast and powerful nafs, comprising both known and unknown (not yet discovered) force fields. It served as the primal essence of creation. From within this immense nafs, the unknown force fields necessary for forming the nafses (composite souls) of living beings were extracted. This is reflected in the Quranic verse: *"He created you from a Soul Single (Nafsin-Wahidatin)…"*

The extracted unknown force fields from the Nafsin-Wahidatin were fragmented and recombined in specific proportions to form the nafses (souls) of living creatures, including humans. The emotions of an animal arise from the force fields that make up its nafs—these forces govern its awareness and emotional responses, shaping the interaction of the animal with the world.

The GUT forces (Electromagnetic Force Field, Strong Nuclear Force Field, and Weak Nuclear Force Field) that produced the universe were also from the Nafsin-Wahidatin.

9b. **The Second Torture – Creation of Double Helix DNA Molecule**

The DNA code is the blueprint of life. It guides the formation of the human body, from a single-cell zygote to a hundred-trillion-cell being. Allah alone created the double-helix DNA molecule (pair). *"So set thou thy face steadily and truly to the Faith: God's handiwork, according to the pattern on which He has made mankind: no change in the work by God: that is the standard law—but most among mankind understand not" [Al Quran 30:30]*

Again, the genome of each human is custom-made. The genome is the complete set of DNA in an organism. It contains all the information needed for the organism to form and grow. Almost every cell in the body contains a copy of the complete genome. It carries heredity.

Allah guides the formation of the sperm and ovum and ultimately produces the genome in the zygote with specific codes. It could not be left to chance. If Allah had created the nafs (soul) of an athlete, He would have also given him the DNA of an athlete. Therefore, a specific genome for each individual is produced, and Allah monitors its creation. As the verses say: *He created you from a Soul Single (GUT Force+), then created favorable Pairs (Diploid Chromosomes with specific codes).*

Allah, though highly capable, is one. Out of the three tortures, this is the second torture upon Him.

When Allah descended Adam and Eve, He gave them four pairs of domestic animals. These animals may be from the Earth, but their DNA codes were modified to make them

suitable as domestic animals, as the verses say: *And he sent down for you, of the cattle eight Pairs (eight sets of DNA codes for producing four pairs of domestic animals).*

9c. **Third Torture – Creation in Mother's Womb**

Allah has not left the creation of man to his genome codes alone. He guides the creation, even though scientists may claim that the genome is sufficient. Allah knows—scientists know not.

A genome cannot fashion a human perfectly. A zygote kept in a test tube under the most favorable conditions does not result in a perfect human body. Allah guides the formation in the mother's womb, as the verse says: *"...He creates you in the wombs of your mothers—creation after creation—three tortures"*

How many women are pregnant today? Allah fashions all babies. Of the Three Tortures, this is the Third Torture upon Him.

9d. **Resurrection**

The nafs (main / composite soul) of a human is combination of unknown (yet to be discovered) force fields (elementary soul / ruh). It gets imprinted with the information of physical development in the mother's womb, becoming a program of creation. On Earth, the body is like a mold, and the nafs is like a cast.

The nafs gets fixed at the time of death. It will assist in the resurrection of the body. Then, the nafs will be like a mold, and the developing body will be like a cast.

During the initial creation in the mother's womb, the nafs cannot help; Allah fashions the human. But the nafs, designed in the mother's womb, will assist the genome in

developing the body during resurrection, and it will continue to regenerate the body in the extreme punishment of Hell.

Each human is custom-made, and this process is ongoing. Every person has his unique DNA, and his nafs is shaped alongside the development of his physique in the mother's womb as part of a formative program. Therefore, the Resurrection will be easy.

DNA molecules can survive in nature for hundreds of thousands of years. On the Day of Resurrection, a set of DNA molecules (46) will be attached to a man's nafs. The individual will then grow on the land, absorbing nourishment from the surroundings; much like a plant grows by absorbing suitable matter and energy. The mother's womb will no longer be needed.

> "He Who has made the land calm for you and inserted ways therein for you and has sent down water from the sky. Then He brought forth with it Pairs (Double Helix DNA Molecules carried by the pollen grains) from plants diverse—eat and pasture your cattle. Verily, in this are signs for men endued with understanding. From it (Pairs / Double Helix DNA Molecule) We created you, and in it (Pairs / Double Helix DNA Molecule) We will return you, and from it (Double Helix DNA Molecule) We will bring it out in time another" [Al Quran 20:53-55]

We do not fully understand the function of 98% of DNA. Perhaps 5% of it is intended for the Resurrection. When a set of DNA molecules (46 for a human) is embedded in a nafs, it will form cells, replicate, and produce the body in the same sequence it developed in the mother's womb. However, some individuals may form in devil-human shapes due to the

deformation of their nafs as a result of sins and possession by satans

> "What! When we die and become dust that is a return far. We already know how much of them the earth takes away; With Us is a record guarding"
>
> [Al Quran 50: 3-4]

A human will be recreated with the same DNA he had on Earth, ensuring they cannot deny being the same person who committed the sin.

> Yes, We are able to put together in perfect order the very tips of his fingers." [Al Qur'an 75:4]

If one is here, one will be there too; nothing can be erased. There is no doubt what so ever. We are creatures of a Mighty Arrogant Creator. He says, "Be", and it is!

> "They swear their strongest oaths by God that God will not raise up those who die. Nay, but it is a promise on Him in truth—but most among mankind realize it not—in order that He may manifest to them the truth of that wherein they differ, and that the rejecters of Truth may realize that they had indeed Falsehood. For to anything, which We have willed, We but say the word, "Be", and it is.
>
> [Al Quran 16: 38-40]

10. **Biological Evolution**

The first organism was created about 3 to 4 billion year ago. Life progressed in the water.

The animals evolved from aquatic creatures that lived five to six hundred million years ago. The progression continued as follows:

1. Most known animal phyla first appeared in the fossil record as marine species during the Cambrian Explosion, about 542 million years ago.
2. Land plants appeared about 450 million years ago.
3. The continents began drifting about 225 million years ago.
4. Flowering trees appeared about 73 million years ago.
5. High mountain ranges had formed by about 65 million years ago. These mountains spread clouds across the continents, producing rain and rivers, which in turn raised the groundwater.
6. Adam and Eve are believed to have descended about ten thousand years ago, as suggested by cave paintings and the fossil record of domestic animals.

The following verse narrates the progression of living creatures based on their mode of locomotion. It implies that the verse is referring to animals, as movement is a primary characteristic of animals: *"All animals are motile, meaning they can move spontaneously and independently at some points of their lives" – Wikipedia, the free Encyclopedia*

[However, there are deviations. At lower levels of organization, it is difficult to distinguish between plants and animals. Many lower animals resemble plants in their mode of growth and in the simplicity of their structure. For example, colonies of compound hydroids and coral-forming polyps are plant-like and lack the power of locomotion, yet they are classified as animals.]

> "And Allah has created every animal from water; of them there are some that creep on their bellies; some that walk on two legs; and some that walk on four. Allah creates what He wills, for verily, Allah has power over all things" [Al Quran 24:45]

The verse describes the creation of animals in the sequence of waterborne creatures, creeping creatures, two-legged creatures, and four-legged creatures. This progression is illustrated in the figure below:

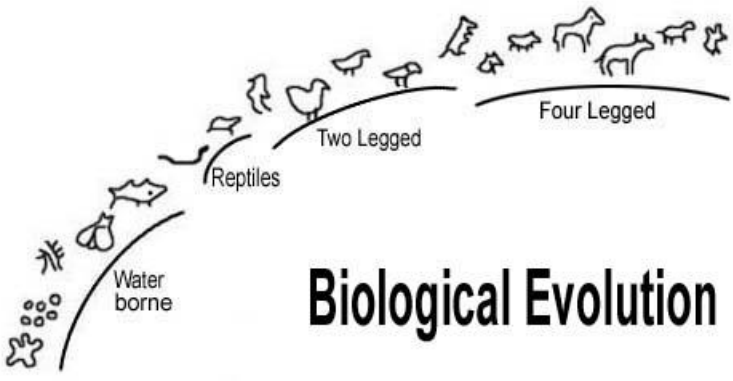


FIGURE 34: Biological Evolution

The figure, adapted from *The New Encyclopedia Britannica,* presents a snapshot of biological evolution. To align it with the verse, I have underlined the categories of waterborne creatures, creeping creatures (reptiles), two-legged creatures (birds), and four-legged creatures (mammals). Humans have been removed from the figure, as the evolutionary link to them is missing—this 'missing link' will be discussed subsequently.

The verse is discussed by dividing it in four parts, as under:

Part-1 of the Verse: *"And Allah has created every animal from water …"* [Al Quran 24:45]

Animals are believed to have evolved from free-floating comb jellies that lived around 730 million years ago. These organisms rely on water flowing through their body cavities to obtain oxygen and food.

A team from Brown University in Rhode Island analyzed massive volumes of genetic data to identify the earliest splits at the base of the 'animal tree of life.' This tree represents a hierarchy of evolutionary relationships among species, illustrating which groups diverged first on their own evolutionary paths. The findings were unexpected, as evolutionary biologists had previously believed that the less complex sponges were the earliest to evolve. However, the study suggests that comb jellies—more complex organisms with connective tissues and a nervous system—may have evolved first.

FIGURE 35: Comb Jelly

Plants and animals initially evolved in the sea, as they could not survive on land due to lethal ultraviolet (UV) radiation, which was unfiltered in the absence of an ozone layer. Once sufficient free oxygen was produced in the atmosphere, the ozone layer formed, shielding the Earth's

surface from harmful UV rays. This allowed living creatures to begin venturing onto land.

However, a fish could not migrate to land directly. The challenges of adapting to terrestrial life were numerous, including gas exchange, water conservation, reproduction, and dispersal. To overcome these, animals evolved internal gas exchange systems, waterproof skin, reproductive strategies that did not rely on water, and strong support structures that enabled movement on land.

Part-2 of the Verse: *"…Of them there are some that creep on their bellies…"* [Al Quran 24:45]

Animals began exploring land around 530 million years ago. A discovery made in 2002 suggests that arthropods were the first animals to make this transition.

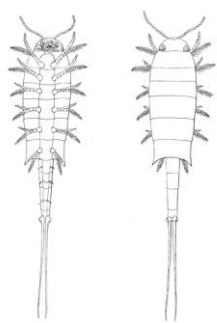


FIGURE 36: Euthycarcinoids

Following the arthropods, tetrapods began to appear on land. Early tetrapods, such as Ichthyostega (see figure below), were amphibians and were closely related to lobe-finned fishes like Eusthenopteron (see figure below).

The Eusthenopteron belongs to a group of fish known as lobe-finned fishes. The Coelacanth (see figure below) is a living representative of this group.

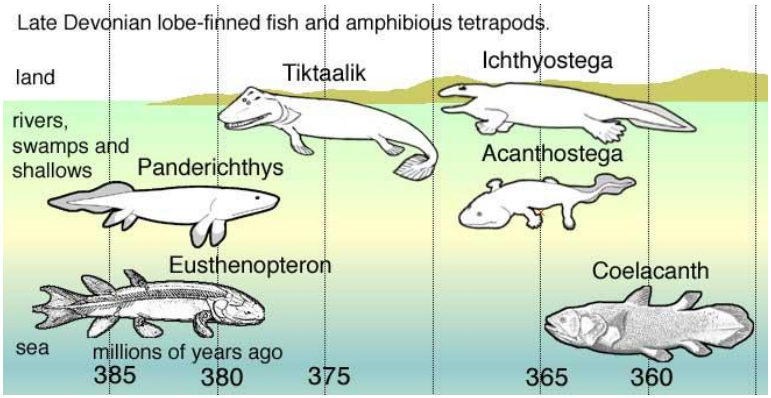


FIGURE 37: Ichthyostega, Eusthenopteron, and Coelacanth (Wikipedia)

Reptiles first appeared on land around 360 million years ago. The evolution of the amniotic egg during this period enabled them to reproduce away from aquatic environments, allowing early reptiles to fully colonize terrestrial habitats.

The amniotic egg enabled the ancestors of modern reptiles, birds, and mammals to reproduce on land by protecting the embryo from drying out. As a result, eggs could be laid away from water sources.

The early reptiles belonged to a group called cotylosaurs. They were small, lizard-sized animals.

FIGURE 38: Cotylosaurs

Thus, the creepers made their appearance on land. In Figure 33, the sixth and seventh creatures—namely the snake and the turtle—are examples of animals that creep on their bellies.

Part-3 of the Verse: *"... Some that walks on two legs ..."* [Al Quran 24:45]

Lizards have limbs that jut out sideways, causing them to creep along on their bellies. In contrast, dinosaurs evolved limbs positioned beneath their bodies, which gave them an upright posture. Reptiles gave rise to the dinosaurs, some of which eventually walked on two legs.

Birds evolved from theropod dinosaurs, a group that included many bipedal species. Like their ancestors, birds also walk on two legs.

Thus, from reptiles creatures that walk on two legs emerged.

In Figure 33, the creatures from the eighth to the twelfth positions—specifically the Penguin, Chicken, Duck, Pigeon, and Kangaroo—all walk on two legs.

Part-4 of the Verse: *"...And some that walk on four. Allah creates what He wills; for verily Allah has power over all things"* [Al Quran 24:45]

By 125 million years ago, mammals had become a diverse group of organisms. The absence of lumbar ribs suggests the presence of a diaphragm, and they also had well-developed canine teeth, along with a bony secondary palate that allowed separate passages for air and food to the back of the throat. However, mammals were minor players during this time. They were small and survived by adapting to a hidden lifestyle, often dwelling in burrows.

As the world entered the Jurassic Period (213–145 million years ago), reptiles dominated the planet. Dinosaurs ruled the land, crocodiles, ichthyosaurs, and plesiosaurs dominated the seas, and the skies were inhabited by pterosaurs. However, during the subsequent Cretaceous Period (145–65 million years ago), many of these dominant groups began to decline.

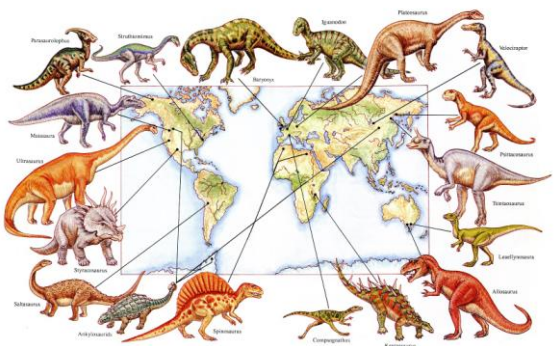


FIGURE 39: Dinosaurs

The origin of flowering plants during the Cretaceous Period triggered a major adaptive radiation among insects. Butterflies, moths, and ants appeared and flourished, with insects playing a crucial role as pollinators.

The mass extinction at the end of the Cretaceous Period, 65 million years ago, wiped out the dinosaurs, along with

other land animals heavier than 25 kg. This event cleared the way for the expansion of mammals.

Thus, after the animals that walked on two legs (dinosaurs, flying reptiles, and birds), the animals that walked on four legs—mammals—evolved.

In Figure 33, the 13th to 18th animals—namely the Rabbit, Pig, Donkey, Horse, Dog, and Monkey—are depicted walking on four legs.

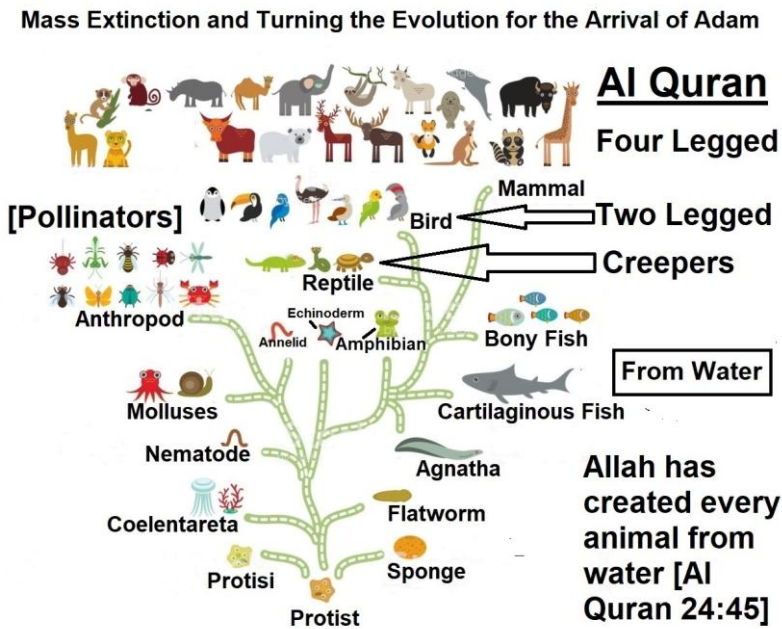


FIGURE 40: Evolution of Animals

According to the following verse (24:45), the final stage of animal creation is represented by four-legged creatures. Therefore, humans are excluded from this sequence.

"And Allah has created every animal from water; of them there are some that creep on their bellies; some that walk on two legs, and some that walk on four. Allah creates what He wills, for verily, Allah has power over all things" [Al Quran 24:45]

The following table is adapted from *The New Encyclopedia Britannica*, with the exception of the rightmost column, which I have added to illustrate the support of the Qur'an for the theory of biological evolution.

Progression of Animals, as has been discovered		**Quran's (24:45) Progression on the basis of Locomotion**
Age of Era	**System**	
Precambrian Creatures 4500–3300 Million Years	Old single-cell and multi-cell creatures. (**Marine Creatures**)	*...Allah has created every animal from water…*
Paleozoic Creatures 600–280 Million Years	Fishes and Reptiles (**Creeping Creatures**)	*...Of them there are some that creep on their bellies…*
Mesozoic Creatures 230–135 Million Years	Dinosaurs, Flying Reptiles, Birds (**Two Legged Creatures**)	*...Some that walks on two legs...*
Cenozoic Creatures 63–13 Million Years	Mammals (**Four Legged Creatures**)	*...And some that walk on four…*

Thus, the Qur'an does not contradict the concept of biological evolution. However, it presents a different perspective specifically regarding humans and certain domestic animals.

> "…And he sent down for you of the cattle eight Pairs (Double Helix DNA Molecules)..." [Al Quran 39:6]

The oldest fossil of a domesticated cow dates back approximately 10,200 years—indicating a 'missing link' in their lineage as well. Adam and Eve were sent down to Earth around this same time.

Three other notable domestic animals are the goat, horse, and camel. The evolutionary histories of these animals show significant adaptations that made them especially suitable for human use. It is possible that Allah brought them into existence by modifying the genomes of similar pre-existing creatures.

Cave paintings and DNA analysis suggest that Adam and Eve—representing so-called modern humans—appeared on Earth around ten to twelve thousand years ago. Older fossils that resemble human bones belong to different species of ancient apes and primates, not to humans.

11. **Creation of Adam**

There are four verses that help us understand how Allah created Adam. According to these, Allah created Adam from four elements, as outlined below:

a. Water
b. Pairs (Double Helix DNA Molecules)
c. Amino Acid *(Salsalin Hama-in Masnunin)*
d. Tinin *(Lute* / Genome Expression)

:

11a. **Water**

Following verse talk about water:

> "It is He who has created humans from water 'and made his *(fajaalahu)* descendants *(nasaban)* and fusion *(wasihran)*. For your Lord has power over all things." [Al Quran 25:54]

In the above verse, "wasihran" is commonly translated as "and marriage relationship" which is a significant deviation. Close translation is "and fusion," referring to the fusion of sperm and ovum, which maintains hereditary traits in the descendants.

A large part of human body is water.

11b. **Pairs (Double Helix DNA Molecules)**

The following verse refers to the double helix DNA molecule:

> "Glory to God Who created all things that the earth produces as well as their own kind and things of which they have no knowledge from Pairs (double helix DNA molecules)" [Al Quran 36:36]

All earthly creatures—from the amoeba to the blue whale, including humans—are created using double helix DNA molecules (pairs); the only difference lies in the genetic codes.

11c. **Amino Acid *(Salsalin Hama-in Masnunin)***

The human body is made up of various kinds of proteins, and these proteins are formed from twenty types of amino acids, available in a living cell. The following verse refers to amino acids:

> "We created man from the sauce *(salsalin / salsa* / sauce) of carbon *(huma-in* / black mud / carbon), altered *(masnunin /* altered / twenty types)."
>
> [Al Quran 15:26]

The 'altered sources of carbon' *(salsalin huma-in masnunin)* refer to the 'twenty types of amino acids' found in a living cell. These amino acids are obtained from the food that creatures consume. From these 20 types, DNA can synthesize over a thousand different kinds of proteins, which collectively form the human body.

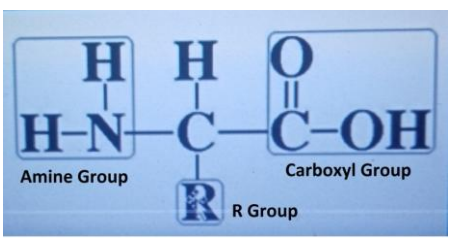


FIGURE 41: Generic Structure of Amino Acid

Each amino acid consists of a central carbon. The central carbon is bonded to an amine group (NH2), a carboxyl group (COOH), a hydrogen atom and an R group.

FIGURE 42: Amino Acid

Liquid aminos, available in the market, are concentrated amino acids that resemble soy sauce in both taste and appearance.

11d. **Tinin *(Lute* / Genome Expression)**

However, Adam did not appear as a result of biological evolution. Allah created him separately, which is said in the following verses:

> "The One Who made good everything He created,
> and He began the creation of man from *tinin* (lute / genome expression)." [Al Quran 32:7]

In light of the above verse, we can say that after evolving suitable creatures to support human life, Allah personally created Adam from 'tinin' (lute / genome expression).

In the Quran, 'tinin' is usually translated as 'dust,' but dust is silicon-based, while humans are carbon-based creatures. 'Tinin' can also mean 'lute' in the dictionary, which refers to an ancient Arabian stringed instrument, similar to a guitar. The term 'lute' seems more fitting in the context of the verse, as the double helix DNA molecules of a zygote can be

compared to the strings of a lute and its music can be likened to 'genome expression'—just as a lute produces music when its strings are played, gene expression, much like a symphony, orchestrates the creation of proteins, ultimately shaping a human.

The ancient Arabs, influenced by philosophers like Socrates, believed that humans were created from the earth, which is why they understood 'tinin' to mean 'earth' or 'dust.' This interpretation became more established in the eighth century and later, particularly when Arabic dictionaries were compiled. However, during the time the Quran was revealed, the term 'tinin' actually referred to the 'lute'—an ancient stringed instrument—or the 'music of the lute.' This meaning aligns more closely with the idea of 'genome expression,' where the harmony of genetic information creates life, much like music is created from the strings of a lute.

A human double helix DNA molecule is a 6-foot-long thin string that remains coiled within a microscopic chromatin. A cell with 46 double helix DNA molecules is like a lute with 46 strings. The music they produce—representing genome expression—forms a human body.

The human genome is essentially a complete set of instructions for building and maintaining the body. It is made up of about 3 billion DNA base pairs, which are organized into genes. These genes code for proteins, which are the building blocks of life.

Not all genes are active at all times. Gene regulation controls when and how much a gene is expressed, allowing cells to perform specific tasks. For example, in a developing embryo, certain genes are expressed to form organs, tissues, and body systems. In fully developed humans, gene expression helps maintain homeostasis (balance) and allows the body to respond to changes, like healing after an injury

As a human grows, gene expression contributes to physical and functional development. From the initial single fertilized egg cell, multiple rounds of cell division and differentiation occur, driven by the precise activation of the genome at different stages of development.

Thus, Allah produced the zygote of Adam and planted it in a suitable place supplying nourishment (amino acid mainly). The cell multiplied, and Adam was created. This is the basic way of creating a human. On the Day of resurrection humans will grow in this way.

However, on Earth, a human is created in a mother's womb. This creation is determined through the fusion of sperm and ovum, as the verse says: *"It is He who has created humans from water 'and made his (fajaalahu) descendants (nasaban) and fusion (wasihran). For your Lord has power over all things." - Al Quran 25:54.* It is done to fulfill the requirements of earthly human life.

12. **Missing Link**

We do not disagree with biological evolution; indeed, the Quran indicates that Allah evolved living creatures from lower to higher forms—starting with waterborne creatures, followed by creeping creatures, bipedal creatures, and four-footed animals (Al Quran 24:45). However, the Quran differs when it comes to humans, as it states that Allah created them directly.

Therefore, we must determine whether humans fit into the chain of biological evolution. In other words, we need to understand the 'Missing Link' in light of both the Quran and modern science.

After the publication of Darwin's *On the Origin of Species by Means of Natural Selection* in 1859 and *The Descent of Man and Selection in Relation to Sex* in 1871,

many began to believe that human beings evolved directly from existing apes (chimpanzees, orangutans, gorillas, etc.).

Fossil discoveries over the past two hundred years and beyond have failed to support the idea that humans evolved from existing apes. While the chest and hand bones of humans and modern apes are similar, significant differences exist in other parts of the body. The following are areas of notable divergence.

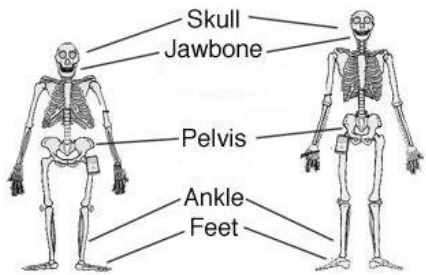


FIGURE 43: Areas of Notable Divergence

Skull: The average cranial capacity of a human is 1450 cc, whereas the cranial capacity of an existing ape ranges from 325 cc to 659 cc.

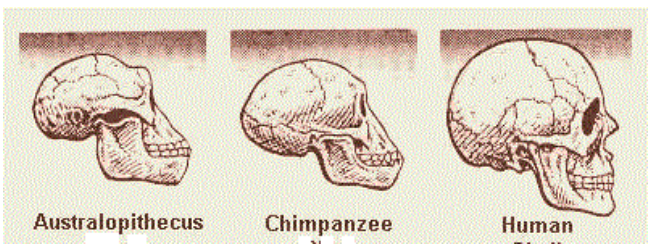


FIGURE 44: Skull

Face: Existing apes have a smaller chin, larger jawbones and teeth, a flatter nose, a more prominent brow ridge, a receding forehead, a thicker skull, and a bony protrusion at the back of the skull called the occipital torus (which connects the neck muscles to the head and is found only in apes).

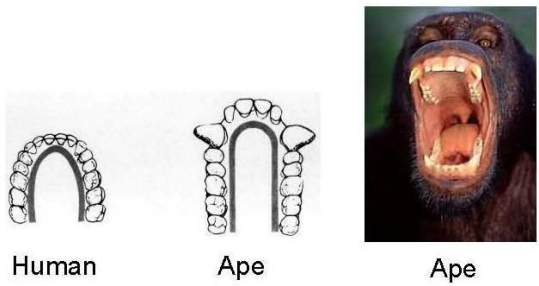


FIGURE 45: Dentition

Head-Neck Attachment: Humans have a head-neck attachment suited for an upright posture, whereas apes have a head-neck attachment suited for four-legged animals.

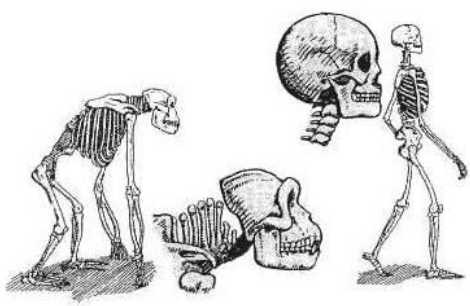


FIGURE 46: Head-Neck Attachment

Pelvis: The human pelvis is structured for sustained bipedal standing and walking, whereas the ape pelvis is not suited for prolonged two-legged standing or more than a few steps of bipedal movement.

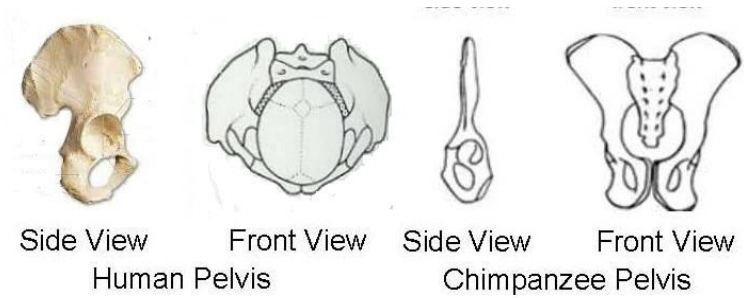


FIGURE 47: Pelvis

Legs: Humans have long, well-built legs, and their feet are structurally distinct.

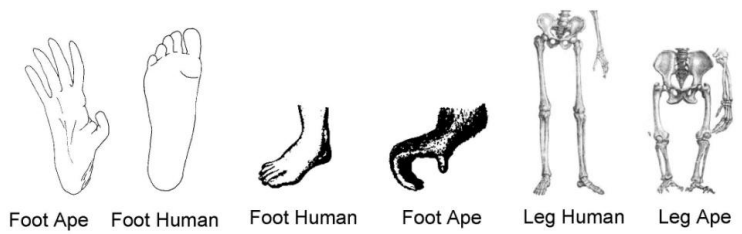


FIGURE 48: Foot and Leg

Body Proportion: Body proportion of ape and human differs greatly. Apes have long, well built and strong hands and comparatively short and weaker legs. It is opposite in case of humans.

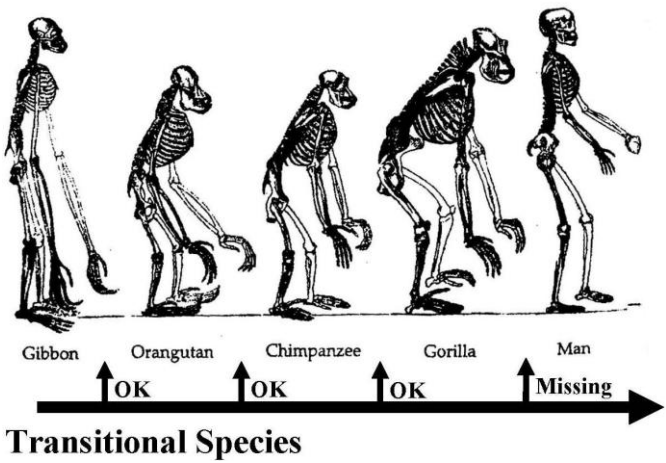


FIGURE 49: Body Proportion

A difference is not inherently negative; otherwise, there would be no distinctions between species. However, a significant difference is a matter of importance, as it necessitates transitional species to bridge the gap. It is evident that gibbons, orangutans, chimpanzees, and gorillas evolved from a common ancestor, differing primarily in size. But, humans exhibit substantial differences, particularly in the skull and physical structure related to locomotion.

Early evolutionists theorized that the sensitive hands of certain modern apes (such as chimpanzees, orangutans, and gorillas) led to the development of larger brains. As a result, these apes left the trees and began walking on two legs. Bipedalism caused their legs to become longer and stronger. Eventually they became humans.

However, no fossil of any modern ape has been found that shows evidence of an increasing brain size, nor has any been discovered indicating development in the pelvis or legs. Therefore, this idea has been proven wrong.

They believed that one day, fossils of linking species would be found. However, after more than two hundred years of searching, no such fossils have been discovered.

Evolutionists now propose that two branches evolved from a common, hypothetical ancestor: Hominids and Pongids. In the Hominid branch (family), humans evolved, while in the Pongid branch, modern apes—such as orangutans, gorillas, and chimpanzees—evolved.

Evolutionists suggest that a few fossils from the Hominid branch have been discovered, and they continue searching for fossils of ape-like creatures that could strengthen the hypothetical Hominid lineage. However, despite decades of searching, the fossil record remains limited. The finds are mostly fragments of craniums, jaws, teeth, and hand bones. Using these controversial fragments, skeletons of fictional transitional creatures are reconstructed to support the Hominid branch. These reconstructions illustrate the supposed progression of this hypothetical lineage as follows:

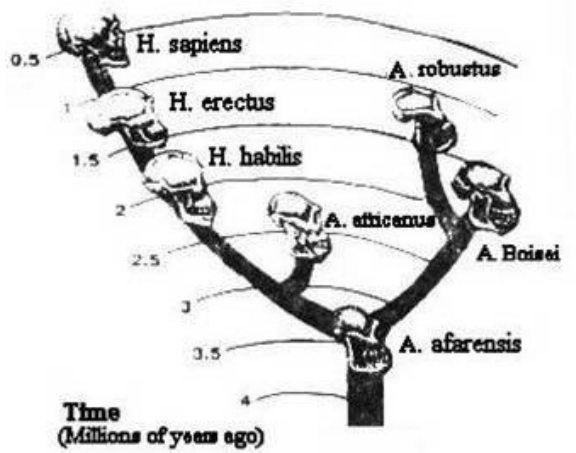


FIGURE 50: Hominid

1. Australopithecus (genus)
2. Homo Habilis
3. Homo Erectus
4. Homo Neanderthalensis.
5. Homo Sapiens (Human beings)

12a. **Human Physical Structure**

We are often misled. Take a look at the following picture, which has been widely circulated. It shows, at least to a child, how humans evolved. But what is the reality? Number 1 is an ape (a gorilla). Numbers 2 and 3 represent fictitious creatures. Numbers 4 and 5 are humans—many of the '4s' are found in South America, and many of the '5s' are found in North America. Does this mean North Americans evolved from South Americans?

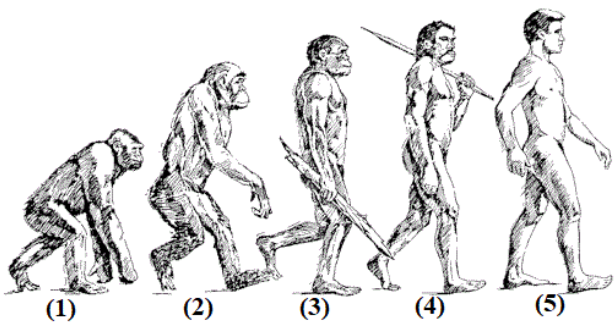


FIGURE 51: Hominid Branch (Artistic Impression)

"To attempt to restore the soft parts is an even more hazardous undertaking. The lips, the eyes, the ears, and the nasal tip, leave no clues on the underlying bony parts. You can with equal facility model on a Neanderthaloid skull the features of a chimpanzee or the lineaments of a philosopher. These alleged restorations of ancient types of man have very

little if any scientific value and are likely only to mislead the public...So, put not your trust in reconstructions."

– *UP FROM THE APE* by EARNST A. HOOTEN, Harvard,

"And cover not Truth with falsehood, nor conceal the Truth when you know." [Al Quran 2:42]

To understand the senselessness of Hominid branch we are to know the physical structure of humans. The modern human skeleton has many unique features that contradict the idea of evolution from ape-like creatures:

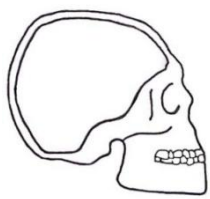


FIGURE 52: Human Skull

Human cranial vault has high maximum breath with vertical forehead.

A human have prominent nose and chin.

A human have smaller jaw and teeth, so it needs smaller masticator muscle on delicate facial structure.

The lighter face requires lighter neck muscle behind the point of balance of the skull. Therefore, the area of head-neck attachment is nearer to the chin.

FIGURE 53: Human Vertebra

Human skeleton shows a fully upright posture: Vertebral column shows two secondary curves when viewed from a side. These curves at the neck region and lumber region allow weight to be evenly distributed about the line of gravity, which passes vertically through the second vertebra, behind the rotation centers of the two hip joints. It permits pelvis to tip backward beyond the line of gravity and rest upon a strap like ligament. It is a sophisticated effort saving mechanism that allows muscles around it to relax during prolonged standing.

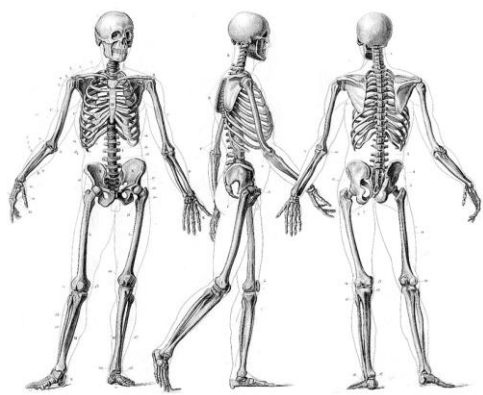


FIGURE 54: Human Skeleton

Ability to lock the knee rearward relaxes some surrounding muscles.

Power to rise from seated position is provided by large buttock muscles.

Pelvic tilt mechanism allows leg to swing clear of the ground during walking. In addition, such tilt must avoid wild side-to-side movement of the center of gravity. This is achieved by inclining the thighbones toward the midline and thus bringing the feet closer together.

Upper limbs provide dynamic balance of the body. Arms swing compensates twist of the body towards the side opposite to the advancing foot.

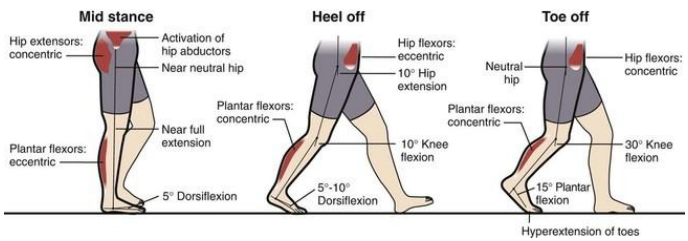


FIGURE 55: Human Walking

Weight and force are transmitted to ground through a propulsive system of short levers that permits a heel-toe stride.

12b. **Australopithecus**

Evolutionists suggest that Hominids evolved from *Australopithecus*. The genus *Australopithecus* comprises five species: A. Afarensis, A. Africanus, A. Anamensis, A. Garhi, and A. Sediba. They propose that these species lived in Eastern Africa 2 to 4 million years ago. However, no members of this genus exist today.

In 1974, Donald Johanson, an associate professor at Case Western Reserve University, and his team discovered a fossil in Ethiopia. It was a piece of a knee joint, which appeared suitable for bipedal walking.

FIGURE 56: The Knee Joint of Lucy (A. Afrensis)

But, just a knee joint alone wouldn't make headlines. Johanson and his team collected fossilized bones from a wide area and reconstructed an ape-like skeleton, which they named 'Lucy.' Lucy represents the species *Australopithecus afarensis*. Her height was approximately one meter.

FIGURE 57: Lucy

Fossilized bones are scarce on the land. Yet, after an extensive search through a wide area, sixty percent of the bones, including the skull, could not be found. As a result, they created a replica of an Australopithecus skull to place with Lucy.

FIGURE 58: Lucy Skull (Replica)

Some evolutionists consider Lucy to be one of the vital missing links. The skeleton is remarkable for its knee joint, which shows that the animal could fully straighten its legs, suggesting that it was capable of walking on two legs. Other parts of the skeleton are ape-like, indicating that the animal was an ape that walked on two legs.

Evolutionists argue that the bipedal walking of this ape triggered the evolution toward humans. It freed the animal from the bow-legged stride that limits modern apes to only a few steps of bipedal walking, keeping them in dense forests where moving through the branches of trees is possible.

The age of the fossil (knee joint) could not be determined in the 1970s and 1980s, but the fossil was placed in the genus *Australopithecus*—such was the excitement! Later, in 1992, the age was determined by dating the layers of volcanic ash found below the site of Lucy. The samples were tested at the

Institute of Human Origins, founded by the same Donald Johanson.

The bones of Lucy belong to different animals from different ages. Those devoted to Biological Evolution constructed its skeleton using fragments of bones collected from a wide area. In fact, the complete skeleton was created to highlight the knee joint, as it is suited for bipedal walking.

"A great legend has grown up to plague both paleontologists and anthropologists. It is that one of men can take a tooth or a small and broken piece of bone, gaze at it, and pass his hand over his forehead once or twice, and then take a sheet of paper and draw a picture of what the whole animal looked like as it tramped the Tertiary terrain. If this were quite true, the anthropologists would make the F.B.I. look like a troop of Boy Scouts."

– *MANKIND SO FAR* by W. HOWELLS, Harvard

A study conducted in 2016 suggests that *A. afarensis* was a tree-dwelling creature:

"To make inferences about how Lucy's bones were used in day to day life, the researchers analyzed 3-D digital models of bones built from scans of the fossil. Bones, like drinking straws, are hollow, and if you were to slice them horizontally you'd have a set of bone bangles. The width of each one of those bangles at particular parts of the bone indicate its strength. This width is called cortical thickness. For example, a professional tennis player's racket arm bone has a larger cortical thickness than that of the other arm. Lucy's bones were pretty thick."

– JOANNA KLEIN NOV. 30, 2016, The New York Times

By comparing the CT scans with those of modern primates and humans, scientists discovered that Lucy's upper limb strength resembled that of a chimpanzee more than a human's.

The skull of *A. afarensis* (the species to which Lucy belongs) is also similar to that of modern chimpanzees:

FIGURE 59: The upper skull belongs to an A. Afarensis (AL 444-2), the lower skull belongs to a modern Chimpanzee

"The very clear similarity between the skull of A. Afarensis (AL 444-2) and Modern Chimpanzees is an evident indication that A. Afarensis was an ordinary species of ape with no human feature"– Adnan Oktar (Harun Yahya).

Thus, a knee joint showing signs of bipedal walking was falsely attached to a fabricated skeleton of an ape (*A. afarensis*) and named Lucy.

No DNA analysis of Lucy's knee joint is carried out. It could be front-leg-knee-joint of a four-footed animal. The Four-footed animals too can fully straighten their front legs.

Therefore, Lucy does not fill up the missing link.

An animal cannot be tree-dwelling and bipedal at the same time. Tree-dwelling requires specialized hands, pelvis, legs, and feet that are suitable for grasping branches. It also requires a high level of skill to swing through the branches, a skill that monkeys and apes are genetically equipped with.

If a forest were to become a savanna, apes would either migrate or die, because surviving in a savanna also demands high land-living efficiency. This includes the ability to run fast, which requires four legs with stronger hind limbs, or a

robust body to fight predators, or a very small body to hide. So, a savanna environment would not naturally evolve a bipedal creature like humans.

Evolutionists suggest that the descendants of *A. afarensis* were *A. africanus*, whose overall physical structure was similar to that of *A. afarensis*. However, no knee joints from *A. africanus* have been found so far.

12c. **Homo Habilis**

Evolutionists suggest that *Australopithecus africanus* evolved into *Homo habilis*. *Homo habilis* is a species in the genus *Homo*.

Homo Habilis is remarkable for its increased cranial capacity, which was about 640 cc in volume.

FIGURE 60: Homo Habilis Skull

They appeared in Africa about 2.5 million years ago and survived for at least fifty thousand years. It is assumed that a group of them evolved into the next species, *Homo erectus*.

The fossils of *Homo habilis* have been found at Olduvai Gorge in northern Tanzania and in the Koobi Fora region of northern Kenya. These include OH-7, OH-13, OH-16, OH-24, KNM-ER 1470, KNM-ER 1813, and KNM-ER 1805. The finds consist of fragments of cranium, jaws, teeth, and hand bones.

Evolutionists suggest that *Homo habilis* were descendants of *Australopithecus*, with increased height and the ability to walk on two legs. They estimate their average height to be 1.52 meters and their average weight to be 45 kg.

"Only a few post cranial parts have been discovered. Some limb bones from Olduvai and Kobi Fora have been grouped tentatively with H. Habilis on the strength of general anatomic similarity to later humans. These fossils however, are not associated with teeth or skulls, and it is probably not appropriate to use them as the basis for describing early Homo"– The New Encyclopedia Britannica.

In 1986, a fossil of *Homo habilis* (OH-62) was discovered in Olduvai Gorge. It is the only fossil with preserved limb remains. This discovery shows that *Homo habilis* was a very small hominid, with arms that were long relative to its leg length. Its body proportions were dramatically different from those of more modern hominids.

"The find is especially important because of the associated limbs, which show that OH 62 is a very small hominid indeed. The arm is long relative to leg length so that this individual has body proportions, which differ dramatically from those of more modern hominids."

– The New Encyclopedia Britannica.

The fossil (OH-62) challenges the classification of *Homo habilis* within the hominid branch and fails to fill the gap of the missing link.

12d. **Homo Erectus**

Homo erectus succeeded *Homo habilis* and lived in almost every part of the Old World. Fossils of this species have been found in Java, China, and Africa. The remains primarily consist of cranial bones, mandibles, and teeth, with a few robust femurs from the postcranial region, which are similar

to human femurs. The species may have had several geographic variants. The earliest fossil evidence dates back to 1.9 million years ago and extends to around 143,000 years ago.

Only a few femurs have been found from the lower part of the body. Evolutionists propose that the configuration of their head-neck attachment indicates an upright posture. The upright animal would typically have the attachment point closer to the chin. However, a tree-dwelling animal might also have this feature.

Homo erectus had an increased average cranial capacity of about 1,043 cc.

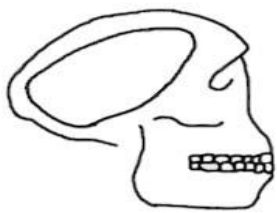


FIGURE 61: Homo Erectus Skull

They had skulls similar to those of apes, with very thick skull bones. The braincase was low, featuring a jutting brow ridge, a receding forehead, and an occipital torus. They also had wide noses, heavy jaws, and palates with very large front teeth. It is likely that *Homo erectus* resembled a kind of gorilla. Many paleoanthropologists believe that modern humans could not have evolved from *Homo erectus*.

"The skulls of the Homo Erectus fossils show other characteristics of their physical appearance. The braincase is low, and the skull bones are thick. They have jutting brow ridge and a markedly thickened area of bone at the hind end of the skull called occipital torus. The forehead recedes, and

the nose, jaws, and palate are wide. The front teeth are larger even than Australopithecus an arctic trait that occurs in apes but in no other hominids. It is generally agreed, however that the dentition is hominid and not ape-like. These mixed traits are puzzling. Some paleoanthropologists see thing as specialized features characteristic of neither Homo sapiens not the ape and question whether Homo Erectus evolved towards Homo sapiens. According to these paleoanthropologists, H. Erectus wandered off the main evolutionary line and could not have been an ancestor to modern humans. This appears to leave two possibilities. Either H. Erectus with his thick cranium and outsize dentition was not on the direct evolutionary line from Australopithecus to H. Sapiens, or H. Erectus evolved specialized features from Australopithecus and then lost them again in the transition to H. sapiens."

– The New Encyclopedia Britannica.

"The total pattern of the bodily structure of H. Erectus as preserved in the bones is rather different from that of Homo sapiens. Parts of the post-cranial skeleton are robust but otherwise generally comparable to those of modern humans. The brain is relatively small, though not so small as that as Australopithecus and H. Habilis. In addition, in this hominid's thick skull bones and extra ordinarily developed eyebrow ridge and occipital torus, some investigators say that they see unique, specialized features, not characteristic either of its presumed ancestors or of apes and not pointing to H. sapiens as the direction of subsequent evolution. Some scientists even infer that these last traits show H. Erectus to have specialized so far off the modern human line that it could not have been ancestral to H. sapiens."

– The New Encyclopedia Britannica.

Fossil evidence clearly shows that Homo Erectus evolved into next species, Homo Neanderthalensis.

12e. **Homo Neanderthalensis (The Neanderthal)**

The species is called *Homo neanderthalensis* because its first fossil was found in Neanderthal, Germany. They had geographic variants in other continents. They emerged between 200,000 and 100,000 years ago, and, as the fossil record shows, the entire species suddenly disappeared about 30,000 years ago.

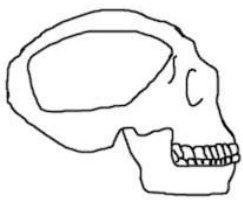


FIGURE 62: Homo Neanderthalensis Skull

The development of *Homo neanderthalensis* from *Homo erectus* is clearly visible. *Homo neanderthalensis* also had a heavy skull with a longer and lower braincase. The face remained large and elongated, with a wide nose and a jutting brow ridge. While their chewing muscles and cheeks were slightly reduced, their teeth remained large, similar to *Homo erectus*. They had the habit of using their mouth as a vise or a third hand. In Asia and Africa, the facial massiveness of Neanderthal relatives was somewhat reduced.

Their hand bones suggest a greater emphasis on power grip rather than precision grip.

FIGURE 63: Power Grip

The way we hold a pen to write is called a precision grip, while the way we hold a rope to climb is called a power grip.

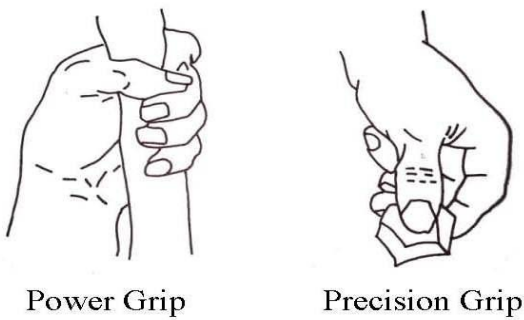


FIGURE 64: Grip

They had large chests, broad shoulders, and extremely muscular upper limbs. Their pelvis, legs, and toes suggest that they required more lateral and irregular movement during locomotion.

Neanderthals lived in small groups. They were capable of making stone tools, as well as wood flakes and spears. They also domesticated fire, as indicated by charcoal and reddened earth deposits found at their sites.

They totally lived on hunting and there is almost no evidence that they had the habit of eating plant food. Small sites and depth of debris indicate that they used to shift from place to place frequently.

Fossil evidence shows a high frequency of traumatic injuries among *Homo neanderthalensis*. The remains exhibit signs of serious wounds, sprains, and fractures. It is likely that they would have attacked if they encountered members of another group in their hunting area.

There is abundant evidence of nutritional deprivation during growth.

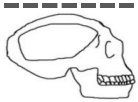
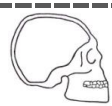
The fossil record shows that around 30,000 years ago, the entire *Homo neanderthalensis* species suddenly disappeared.

Studies of *Homo neanderthalensis* DNA conducted in 1997 and later have confirmed that modern humans did not evolve from *Homo neanderthalensis*.

12f. **Did humans evolved directly from Homo Erectus?**

It is clear that *Homo erectus* evolved into *Homo neanderthalensis*, and that *Homo neanderthalensis* disappeared around 30,000 years ago. Despite this, some evolutionists link modern humans to *Homo erectus* to maintain the continuity of the hominid branch. However, many strongly oppose this idea.

The figures and the chart below show that Homo Neanderthalensis could evolve from Homo Erectus, but modern humans stand far away.

Genus	Erectus	Neanderthal	Human
Features			
Brow ridge	High	High	Plain
Forehead	Receding	Receding	Vertical
Skull bone	Thick	Thick	Thin
Occipital Torus	Present	Present	Absent
Brain case	Longer and Lower	Longer and Lower	Round and High
Chin	Full chin absent	Full chin absent	Prominent chin
Teeth	Large	Large	Small
Head-neck attachment	Rearward	Rearward	Closer to chin

12g. **Evolution of Hominid**

Homo erectus and Homo neanderthalensis had some physical features that bring them somewhat closer to humans. However, this does not make much of a difference. It simply means that creatures resembling humans evolved on Earth and became extinct around 30,000 years ago.

13**. Branching Process**

Missing Link is outdated. Now evolution is considered as a branching process, not a linear chain with missing links.

There are many species that represent different stages in the evolutionary tree. So, it's more accurate to speak about the fossil record in terms of evolutionary branches, not links.

Branching happens when a single population of organisms splits into two or more distinct species, each of which continues to evolve independently.

The branching is driven by genetic variation, natural selection, mutation, genetic drift, and other evolutionary forces. It is not a deliberate or planned process; rather, it's a result of organisms adapting to their environments over long periods of time, with genetic changes accumulating in populations.

The idea of a massive change in genetic code leading to a new, diversified creature is a complex one, touching on fields such as genetics and evolutionary biology. Significant changes in genetic code can and do occur naturally through processes like mutation, genetic recombination, and natural selection. Over long periods of time, these processes can result in the emergence of new species or traits in simpler organisms.

However, mutation, genetic recombination, and natural selection alone could not have produced a complex creature like a human. Mutation occurs in small organisms primarily as a means of adaptation to challenging environments. Major changes in the DNA code, which could produce a pair of new species, are not conceivable without intelligent intervention.

14. **Unique Adam**

When the Earth became suitable for life, Allah created the first living creature and carried forward the evolution. The final creature was Homo Neanderthalensis.

As a product of evolution, Neanderthals were exceptionally fit for survival. They likely didn't need houses or clothes, nor did they probably need to fear predators like lions and tigers. Furthermore, they might have possessed immunity to all diseases.

Despite a braincase size nearly equal to that of humans, Neanderthals could not have been the same kind of creature. The fossil record of Homo Neanderthalensis reveals widespread signs of serious wounds, sprains, and fractures. Even predators like tigers, lions, and wolves don't usually exhibit such extensive injuries in their remains. It's rare to find one of them that lived past forty-five.

"The difficult existence of the Neanderthals is reflected in their high frequency of traumatic injuries (the remains of all older individuals show signs of serious wounds, sprains or breaks), abundant evidence of nutritional deprivation during growth (more than 75 percent have evidence of growth defects in their teeth), and low life expectancies (few lived past 40 years, and almost none lived past 50 years). Yet, they were able to keep severely injured individuals alive, in some cases for decades, again reflecting more advanced social organization"– The New Encyclopedia Britannica.

This evidence indicates a strong inclination among Neanderthals to engage in conflict, both within their own groups and with others. Their considerable physical strength, alongside their relatively developed brains, may have rendered them a significant threat to themselves and to other species. This context may explain the angels' response when Allah announced His intention to create humanity:

> "Behold thy Lord said to the angels: "I will create a vicegerent on land." They said: "Wilt thou place there in one who will make mischief and shed blood?""
>
> [Al Quran 2:30]

For the reasons mentioned above, angels were probably dispatched to eliminate them, potentially accounting for the sudden extinction of the entire Neanderthal species roughly thirty thousand years ago.

However, it was necessary for Adam and Eve to settle on Earth. Adam and Eve descended around ten thousand years ago, after the last glacial period ended 11,700 years ago.

Allah answered:

"He (Allah) said, I know what ye know not."
[Al Quran 2:30]

Allah claimed that He had enough knowledge to create a suitable creature. Allah by Himself created Adam and Eve. They lived in the Jannaat (paradise) for a period and then were sent down to the Earth.

Adam had fundamental differences from the species that were evolved through Biological Evolution. The Quran mentions three capabilities of a human, which make him unique, and proves that he does not stand in the chain of Biological Evolution. Those are:

a. Capability to Learn after Birth
b. Capability of Precision Grip
c. Capability to Speak

14a. **Capability to Learn after Birth**

Homo Neanderthalensis evolved through biological evolution, so their brains remained like the brains of other animals. The brain of an animal is genetically programmed in its mother's womb or in the egg. When an animal takes birth, it knows everything it requires knowing. But it cannot learn anything new—its brain gets fixed with the information it needs. A tiger will never be cunning like a fox and attack human habitation.

Each kind of animal has instinctive behavior and traits. These, they are not taught by their parents—they know it by

birth. A bird knows by birth what to eat, where and how to make nest. Some of them can even fly from the North Pole to the South Pole and can return to the same place. Ask a pilot, how much training and experience is needed to do that!

Scientists have found out that a polar migratory bird hatched in an incubator and grown up separately, can fly to the polar region to the flock it belongs to. How it knows it without ever seeing its kind of bird. Actually, its brain is imprinted with that knowledge by birth. It knows its present location and time, and it knows its due location at that point of time. It utilizes various cues for navigation, including the Earth's magnetic field, the position of the sun and stars, and an internal biological clock. In one flight it would cross thousands of miles to reach its location without losing its direction in day and night.

A baby monkey knows by birth how to grasp and remain hanging in mother’s belly. It exhibits a strong grasping reflex from birth, allowing it to cling tightly to its mother's fur. This is crucial for their survival in arboreal environments, enabling the mother to move freely while the baby stays secure. But a human baby does not have such grasp ability. Human babies are born with a palmar grasp reflex. If one places one’s finger in a newborn's palm, they will instinctively curl their fingers around it and grip quite strongly.

A cow or a goat knows by birth how to walk. Their brains are "wired" with the necessary motor skills from birth, but a human child needs about two years to learn walking.

How they can do it?

When they develop in the eggs or in the wombs, their Genome Codes design their brains and bodies to know and do all they need to know and do. But, after they are born, they cannot learn anything new, as their brains and bodies are

already programmed and designed. They are designed to do what they need to do.

Here a human differs. Unlike animals with more hardwired instincts, a significant portion of human brain development occurs *after* birth and is heavily influenced by environmental interaction and learning. While genes provide the foundational blueprint, the specific neural connections and cognitive abilities are shaped by experience.

While growing in the mother's womb, at a particular stage, the brain of a human baby denies to learn from the genes. Therefore, at the time of birth, a human baby knows nothing. He does not know how to walk, or how to sit. A human baby starts learning after birth, and this process of learning remains active throughout his life. This is why humans have developed so much. They have reached the Moon whereas chimpanzees are still in the forest. Similarly, Neanderthals lived for about 150,000 years but could not develop.

Parts of human brain that run the organs, such as lungs, heart, kidney, etc., are genetically programmed, but parts are like white pages.

It may be mentioned that some animals can learn to obey a few commands, some birds can learn to tell a few words, but the learning is different, not like the learning of humans.

- **Obeying Commands:** Animals can learn to associate specific sounds or gestures with actions through associative learning (classical and operant conditioning). This is often driven by reward and punishment.
- **Telling a Few Words:** Some birds, like parrots, can mimic human speech. However, this is primarily imitation and doesn't necessarily involve a deep understanding of the meaning or grammar behind the

words. They learn to associate sounds with specific contexts.

Key Differences in Human Learning:

- **Abstract Thought and Reasoning:** Humans can grasp abstract concepts, reason logically, and solve complex problems that go beyond simple associations.
- **Language and Symbolic Communication:** Human language is far more complex, involving grammar, syntax, and the ability to convey nuanced meanings, abstract ideas, and hypothetical situations. We use symbols to represent things and ideas.
- **Cumulative Culture and Knowledge Transfer:** Humans can build upon the knowledge of previous generations, leading to continuous progress in technology, science, and culture. This cultural transmission is far more sophisticated in humans.
- **Metacognition:** Humans have the ability to think about their own thinking, understand their learning processes, and develop strategies for learning more effectively.
- **Creativity and Innovation:** Humans can generate novel ideas, create new tools and technologies, and express themselves through complex art forms.
- **Understanding Intentionality:** Humans have a sophisticated understanding of the intentions and beliefs of others, which is crucial for complex social learning and cooperation.
- **Extensive Brain Plasticity over a Longer Lifespan:** While animal brains also have plasticity, the human brain retains a high degree of adaptability throughout

> a much longer developmental period, allowing for extensive learning and skill acquisition.

Animal learning is often focused on immediate needs and survival, driven by instinct and basic associative mechanisms. While impressive in its own right, it generally lacks the abstract, symbolic, cumulative, and metacognitive qualities that characterize human learning. The "white pages" of the human brain remain open for a much longer time and are filled with far more complex and interconnected information through our unique learning abilities. This fundamental difference is what has propelled human development and achievements to the level we see today.

The angels too cannot learn anything new at their own except the angels designed to learn, such as Keramon and Katebin. Their knowledge and abilities are largely fixed and inherent to their creation. In addition, they may be infused with necessary knowledge through Sidratul-Muntaha. However, some leading angels are created with vast knowledge.

Here humans excel. After creating Adam, Allah taught him names of several things and Adam could learn and tell those in front of the angels. It means that Adam had capability to learn after birth. Allah proudly demonstrated the capability to the angels:

> And He (Allah) taught Adam the names of all of them, then He placed them before the angels and said, “Tell me the name of these if ye are right”. They said, “Glory to thee, of knowledge we have none save what Thou has taught us. In truth, it is Thou Who are perfect in knowledge and wisdom.” He said, “O Adam! Tell them their names”, when he had told them. Allah said, “Did I not tell you that I know the

> secrets of the ‘Skies and Lands’ and I know what ye reveal and what ye conceal? [Al Quran 2:31-33]

As Neanderthals evolved from other animal, they could not get rid of the ‘genetic programming process of the brain’ that takes place in the mother’s womb. They could not learn new things. However, a Neanderthal had a big brain, so it had wider scope of programming. They had wider behavior and could live in groups. They were genetically taught to make stone and wooden tools, as the birds are taught to make nests. They had been making the same tools throughout one hundred and fifty thousand years they survived. They used to live in caves. There is no evidence that they domesticated animals or cultivated crops. It indicates that their knowledge and wisdom did not develop. They looked like humans, but they had animal-like brains.

14b. **Precision Grip**

> …let not the scribe refuse to write, as Allah has taught him, so let him write… [Al Quran 2:282]

A human is capable of precision grip. This requires tips of the thumbs and next two fingers to come together in order to hold small object like a brush to paint, or a pen to write—a grip that demands fingers be proportionate and that the joint at the base of the thumb be of a special saddle shaped variety.

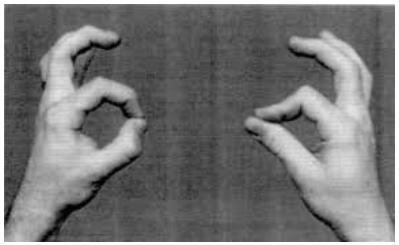


FIGURE 65: Precision Grip

The hands of apes and monkeys are not suitable for precision grip. Fossil evidence shows that the hands of Neanderthals too were not suitable for precision grip. However, recent research on the thumb structure of Neanderthals indicates that while their thumbs might have been better suited for power grips, they were still capable of precision hand postures, although perhaps requiring more effort than in modern humans.

"The details of their (Neanderthals) hand bones, however, suggest greater emphasis on power than precision grip." – The New Encyclopedia Britannica.

FIGURE 66: Hand of Chimpanzee

But our hands are suitable for precision grip. It allows one to hold a pen for writing, or a brush for painting.

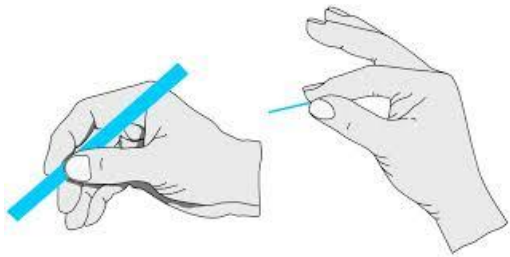


FIGURE 67: Precision Grip

Therefore, humans can write down acquired knowledge for their next generations.

14c. **Capability to Speak**

He has created man. He has taught him to talk
[Al Quran 55:3-4]

Our capacity for speech is a remarkable trait. Adam's mouth was anatomically structured for this purpose. The intricate coordination of our vocal actions relies on an exceptionally large network of nerves, far exceeding that of other animals. We have evolved fully developed languages.

Unlike apes, a large part of human brain is dedicated to control mouth and hands. If the sizes of one's body parts reflected corresponding amounts of one's brain tissues, one would look like the picture below.

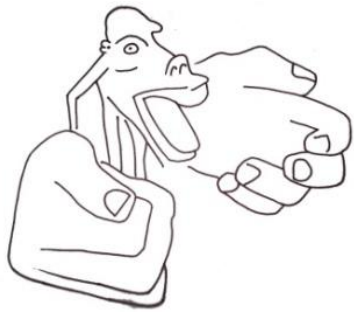


FIGURE 68: Human in Nerve Ratio

Adam's body was made lighter. Skin was made soft. And the descendants of Adam were left with no other option but to use their brains to survive on the Earth.

14d. **A Creation from the Noble Pair (Double Helix DNA Molecule)**

Adam and Eve were created in the Jannaat separately, but with the same double helix DNA molecules with which the earthly creatures were created.

> "Glory to Allah Who created all things that the earth produces (all plants and animals) as well as their own kind (humans) and things of which they have no knowledge (microscopic living creatures), from Pairs (Double Helix DNA Molecules)" [Al Quran 36:36]

According to the verse above, all plants and animals, including humans, are created with the same double helix DNA molecules.

When Allah decided to create humans, rather than creating a new set of DNA, He likely took a set of DNA from an ape-like creature and incorporated human qualities into the

code. Most likely, He took the DNA from a modern ape of the time. With the restructured genome and code, he created Adam in Jannaat, using matter taken from the Earth. He created Eve from Adam's genome, taken from his rib.

We had to have similar DNA to be suited for life on Earth. Only creatures with DNA can either be a part of our food chain or produce our food (synthetic food is not good for health).

> "So, set thou thy face steadily and truly to the Faith. God's handiwork—according to the pattern (double helix DNA molecule) on which He has made mankind—no change in the work by God; that is the established system; but most among mankind understand not." [Al Quran 30:30]

A person who does not turn his face toward the Faith will deform his soul (nafs) and will become nothing more than an improved ape in the afterlife. However, he will still be counted as a human and will be punished for the sins of his earthly life.

14e. **Human, a standalone Creature**

The Quran supports the idea of biological evolution, except in the case of humans. Human beings cannot be fitted into the evolutionary chain.

Allah created Adam with an extraordinarily advanced brain, hands, and mouth. Human beings are not the result of biological evolution, although they were created from the same pairs (double helix DNA molecules).

> "Verily in the skies and lands are sings for those who believe. And in the creation of yourselves and the fact

> that animals are scattered are signs for those of assured faith." [Al Quran 45: 3–4]

However, only the believers will benefit from the signs. Others will fail to comprehend them:

> Those whom God wills to guide, He opens their breast to Islam; those whom He wills to leave straying, He makes their breast close and constricted, as if they had to climb up to the Skies. Thus, does God (heap) the penalty on those who refuse to believe. [Al Quran 6:125]

Refusal to believe comes first, and then God constricts the heart. After that, they develop as unbelievers; even if they were great scientists traveling through space in high-tech spaceships, they would not believe.

> Even if We opened out to them a gate (portal) from the Sky and they were to continue ascending therein, they would only say: Our eyes have been intoxicated, nay, we have been bewitched by sorcery.
>
> [Al Quran 15: 14-15]

Therefore, accepting the True Faith is very important. However, Allah will not compel anyone to believe. He is the owner of both universes: the Samawaat (this universe) and the Jannaat (another universe). He has a plan to appoint His vicegerents (humans) over the objects of the universes. Those who have True Faith will be transferred to the Jannaat, while those who refuse to believe will remain in the Samawaat. The objects of the Samawaat (galaxies) are the objects of Hell.

> Many are the jinns and men we have made for Hell. They have hearts wherewith they understand not, eyes wherewith they see not, and ears wherewith they hear not. They are like cattle, nay, more misguided—for they are heedless. [Al Quran 7:179]

The opportunity to accept the True Faith remains open throughout one's earthly life. Allah has sent the Quran—do not refuse to obey; do not be heedless.

15. **Six Days in the Quran**

The Six-Day Model of creation in the Quran is somewhat different from scientific models of creation. However, the Quran is correct. The differences in scientific models arise due to a lack of complete information. This will be discussed further below:

15a. **Length of a Day**

According to the Quran, the Days of God may vary in length.

15a(1). **One Thousand Year long Day**

A day may be one-thousand-earthly-year long:

> ...Verily a day in the sight of thy Lord is like a thousand years of your reckoning. [Al Quran 22: 47]

> He rules affairs from the skies to the earth; in the end will go up to Him in a Day—measure a thousand years of your reckoning. [Al Quran 32: 5]

These days represent periods of universal affairs related to the fates of living creatures. Fate is determined, and the angels who monitor these fates come in groups, each corresponding to one thousand earthly years.

15a(2)**. Fifty Thousand Year long Day**

> A questioner asked about a Penalty to befall, the Unbelievers, the which there is none to ward off from Allah, Lord of the Ways of Ascent: The angels and the ruhs ascend unto Him in a Day. The measure whereof is fifty (thousand years). [Al Quran 70:1-4]

The above verses refer to the Day of Final Judgment, which will last for fifty thousand earthly years.

Therefore, a 'day' of six days may vary in length.

15b. **Verses Narrating Six Days**

The Six Days are deliberately described in the following verses:

> Say: Is it that ye deny Him Who created the land in **two days**? And do ye join equals with Him? He is the Lord of the universes.
>
> And He placed therein firmly set mountains, and parked therein from above it, and determined therein its sustenance in **four days** equal; for those who ask.
>
> Moreover, did *istawa* (established Himself in the Universe by infusing gravitational force) into the Sky, while it had been smoke. He said to it and to the lands: “Come ye together, willingly or unwillingly”. They said: “We do come in willing obedience”. So,

> He completed them as Seven Skies in **two Days** and He assigned to each Sky its duty and command. And We adorned the lowest Sky with lights, and with guard. Such is the Decree of the Exalted in Might, Full of Knowledge.
>
> [Al Quran 41:11-12]

In these verses, creation is described in a sequence that aligns with the common sense of the people of old. However, it remains true by adopting a technique, as explained below:

People of old believed that, no matter which direction they moved in, they would ultimately reach the ocean. Hence, they thought the land was floating on water. However, a piece of land cannot float on water, so their belief was that the land rested on the back of a giant turtle.

The Holy Bible described the creation of the sky, which dispelled the Turtle Theory. The new idea was that water covered a massive land. God created a vast dome that moved the water from a part of the land. The protected part of the land became the Earth, and the dome became the Sky.

In these widely circulated ideas, the sky was created after the land. The Quran did not directly counter this idea, as doing so could have placed Prophet Muhammad (pbuh) in an undesirable position. Therefore, in these verses, the creation of the Earth is described first. It is worth noting that these verses were revealed in response to a question from a Jew.

However, the Quran has adopted a technique to convey the reality: If you add up the number of Days mentioned in the verses, it totals 8 Days, not 6 Days:

a. 2 days in the 1st paragraph – the land was created.
b. 4 days in the 2nd paragraph – sustenance was placed from above.

Total: 6 days, describing the creation of Earth.

c. 2 days in the 3rd paragraph – the Single-Sky-Universe, full of smoke, was transformed into Seven-Skies-Universe.
Grand Total: 8 days

The last 2 days were actually days of preceding cycle of the universe. I have discussed that the universe is cyclic and we are living in the second cycle.

The Big Bang occurred at the beginning of the preceding cycle (1st Cycle), producing mainly hydrogen and helium. Scientists calculate that, 15 minutes after the Big Bang, the Universe was no longer hot enough to produce new elements. While elements heavier than helium could have been formed within the first 15 minutes, they would not have survived due to the extreme temperatures of the early universe.

"One can calculate that in the hot Big Bang model about a quarter of the protons and neutrons would have converted into helium nuclei, along with a small amount of heavy hydrogen and other elements."

– *A Brief History of Time* by Stephen Hawking.

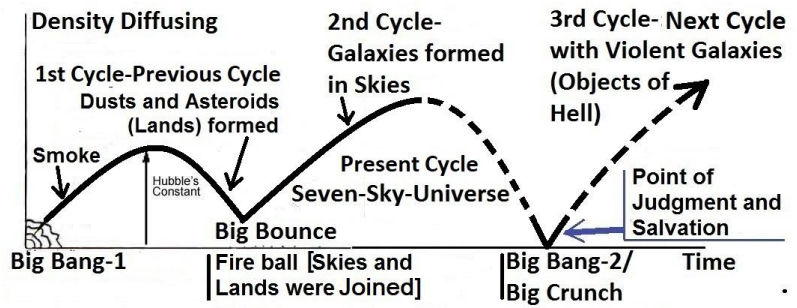


FIGURE 69: Cyclic Universe

Allah did *istawa* (established Himself in the Universe by infusing gravitational force) into the single-sky-universe of the preceding cycle, which was filled with smoke (mainly hydrogen and helium). The gravitational force caused the single-sky-universe to contract, leading to the production of heavier elements, at least up to silicon. These heavier elements formed an 'assembly of lands' with dust and asteroids, as mentioned in the following verse:

> He is the One Who created for you what was in the assembly of lands (fil-ardi-jamian / dusts and asteroids). Then He turned to the Sky and made them into Seven Skies (The seven-sky universe of the present cycle began with a Big Bounce). And of all things He had perfect knowledge. [Al Quran 2:29]

Similar idea is given in Holy Bible as well:

> …I alone stretched out the Skies (seven-sky-universe of present cycle); when I made the Earth (lands / dusts and asteroids), no one helped Me. – Isaiah 44:24, Holy Bible (GNB)

Due to extreme pressure and temperature, the contracting single-sky-universe of the preceding cycle experienced a Big Bounce (from a non-singular state of the universe), marking the beginning of the present cycle. During the Big Bounce, the single-sky-universe transformed into a seven-sky-universe. The Skies are like waves of space, one inside the other, similar to the layers of an onion.

The following verse also describes the Big Bounce origin of the present cycle:

> Do not the unbelievers see that the Skies and the Lands were joined together (as one unit of creation) before We clove them asunder… [Al Quran 21:30]

The above verse suggests that there were lands (dust and asteroids) in the initial universe. This implies that the present cycle began from a non-singular state of the universe through a Big Bounce, where dust and asteroids could exist.

Therefore, the last two days of the eight days mentioned above were days of the preceding cycle.

And, the last two days and the first two days were the same days.

15c. **Four Days of Present Cycle**

Excluding iron, the Earth is primarily composed of silicon and elements lighter than silicon. The following four elements make up over sixty percent of the Earth: one is silicon, and the other three are lighter than silicon.

- Silicon – 15.1 %
- Oxygen – 30.1 %
- Magnesium – 13.9 %
- Aluminum – 1.4 %
- **Total – 60.5 %**

The atomic number of silicon is 14. The lighter elements in the periodic table include: Hydrogen, Helium, Lithium, Beryllium, Boron, Carbon, Nitrogen, Oxygen, Fluorine, Neon, Sodium, Magnesium, and Aluminum. Silicon and these elements, lighter than silicon, were created in the contracting universe of the preceding cycle.

After the Big Bounce, the current cycle began, and the universe became a seven-sky universe. The skies are 'waves of space,' which helped accumulate matter into massive

conglomerates that eventually formed galaxies by creating stars.

In the current cycle of the universe, elements heavier than silicon formed in the stars due to fusion reactions in their hot cores and supernova explosions. These explosions scattered the elements into space. The elements heavier than silicon were brought from these sources and deposited on Earth, as the following verse states:

> And He placed therein firmly set mountains and blessed therein from above it and determined therein its nourishment in four days equal; for those who ask.
> [Al Quran 41:10]

The elements brought from above included massive amounts of iron, making up 32.1% of the Earth.

> "And we sent down the iron, wherein there is strength and many benefits for the people." [Al Quran 57:25]

Rest 7.4% (100 – 60.5 – 32.1 = 7.4) was as under:

- Sulfur – 2.9 %
- Nickel – 1.8 %
- Calcium – 1.5 %
- Trace amounts of other elements – 1.2 %
- **Total 7.4 %**

According to the verses above (41:10 and 57:25), these elements serve two purposes, as discussed below:

15c(1).**Nourishment (7.4%)**

Living creatures require many elements heavier than silicon in their bodies. Some of these elements provide nourishment

to living creatures, as the verse (41:10) states: *'...and determined therein its nourishment in four days equal...'*

15c(2). F**irmly set high Mountains (Iron 32.1%)**

Iron played a crucial role in the formation of Earth's active core. The heat from this molten iron core drives continental drift by generating convection currents in the asthenosphere. Consequently, the pressure exerted by drifting continents counteracts the sinking of high mountains into the Earth, as alluded to in the verse: *"And He placed therein firmly set mountains…"* Without this counteracting force, these massive mountains would gradually subside into the Earth over geological timescales. For instance, the ongoing collision of the Indo-Australian Plate with the Eurasian Plate causes the Great Himalayan Range to remain standing.

15d. **Melting of the Earth**

The falling material contained short-lived radioactive elements. The decay of these elements generated significant heat, causing a large portion of the early Earth to melt. This molten state led to the differentiation of the Earth into its core, mantle, primitive crust, and atmosphere.

"At some point, the release of energy by radio-active elements must have melted a large part of the Earth since this is the only way known for the separation of the original body of uniform composition into a core and a mantle. A similar process occurs when impure iron is melted in a steelwork and the nonmetallic parts separate out to from a low-density slag which floats to the surface. It was in this way that the primitive crust was formed."

– *Planet Earth* by Peter Owen in The Encyclopedia of Space Travel and Astronomy edited by John Man.

The short-lived radioactive elements long since decayed, but the long-lived radioactive elements, such as uranium, thorium, etc., and weakly radioactive potassium are still present in the Earth, which maintains the temperature in the core of the Earth at 4000-degree centigrade.

We find the indication of this melting in the following Hadith:

> Allah sent Gabriel to Malik (Chief angel of Hell) to bring fire from the Hell and give it to Adam for cooking. Malik asked Gabriel, how much fire he wanted to take? Gabriel said, 'If I take a finger of fire, the sky and land will burn'. Malik said, 'In that case half finger of fire?' Gabriel said, 'If half finger of fire is given, not a single drop of rain will fall from the sky and no tree will grow'. Gabriel shouted, 'O Allah, how much fire should I take?' Allah said, 'Amount of a dust (*zarrah*)'. He took the dust of fire, and put it on the highest mountain among all mountains after washing it seventy times in seventy rivers. The mountain melted, and the fire went back, from where it came, leaving its effect in the iron and the stone. Still today we are using the smoke of that fire particle.
>
> [Dakaikul Akhbar]

The Hadith states that the fire was brought for Adam, but this doesn't necessarily mean Adam was present on Earth at that moment. The Hadith seems to refer to a time before plants had even grown: *"…Gabriel said, 'if half a finger of fire is given…no tree will grow…'.*

The Hadith states that the fire-particle originated from Hell. The subsequent Verse and Hadith suggest that galaxies are objects of Hell. These galaxies are held by super-massive black holes, which produce intense energy.

> "And We have adorned the Sky of the World with lamps (stars), have made such missiles to drive away the satan, and have prepared for them the penalty of the blazing fire of hell" [Al Quran 67:5]

> "During Miraz, I saw in the Seventh Sky, there were thunder and roaring sound and a group of people. Their bellies were as big as houses. In those, there were many snakes, which were being seen from the outside. I asked to Gabriel, "Which kind of people they were?" He said, "It is the scene of those who devoured usury" [Bukhari]

The fire particle could potentially be a tiny black hole. Hawking describes in his book, what would happen if a black hole with the mass of a mountain were brought into Earth:

"If a black hole would have the mass of a mountain compressed into less than a million millionth of an inch, the size of the nucleus of an atom! If you had one of these black holes on the surface of the Earth, there would be no way to stop it from falling through the floor to the center of the Earth. It would oscillate through the Earth and back, until eventually it settled down at the center."

– *A Brief History of Time* by S. W Hawking.

Probably, fire particles melted a large part of the Earth. As a result, liquid iron settled in the core, while lighter materials floated to the surface, forming the mantle and the primitive crust.

The Hadith states that the fire returned to its origin, yet its effects remain in the stone (referring to the Earth's mantle) and the iron (referring to its core). These enduring effects include the iron core maintaining a temperature of four

thousand degrees centigrade and the continued activity of molten rocks.

The molten early Earth released the necessary gases to form the atmosphere, providing an environment where Adam could cook. This melting also made Earth a geologically active planet, allowing for the formation of its core, mantle, and primitive crust. Consequently, continental drift became possible, leading to the formation of mountain ranges.

> "And He placed therein firmly set mountains and blessed therein from above it and determined therein its nourishment in **four days** equal; for those who ask." [Al Quran 41:10]

16. **Likely Lengths of Four Days**

It seems that the four days began around 4.6 billion years ago with the fall of short-lived radioactive elements (fire particles) and ended with the formation of high mountain ranges about 0.6 billion years ago.

The verse (41:10) above states that these days were equal in length. Therefore, each of these four days was approximately one billion years long [(4.6 – 0.6) ÷ 4].

Scientists calculate the age of the Earth to be 4.6 billion years because the elements used in their experiments—such as lead, thorium, uranium, and argon—were deposited on Earth around 4.6 billion years ago, originating from supernova explosions. But, bulks of the elements up to silicon were created in the preceding cycle of the Universe.

17. **Age of the Universe**

These days of Six Days do not represent the age of the Universe. Two Days belong to the preceding cycle, while Four Days are part of the present cycle of the Universe.

> "What! Are you more difficult to create, or the sky? He has constructed it. He has raised its thickness, and He has given it order and perfection. Its night does He endow with darkness, and its splendor does He bring out.
>
> And the land moreover has He extended. He draws out there-from its moisture and its pasture. And the mountains He firmly fixed: For use and convenience to you and your cattle."
>
> [Al Quran 79: 27–33]

The vast Universe had to expand at tremendous speeds to reduce the intensity of light and heat, making it suitable for our cattle and us.

The skies are waves of space, one inside another, like the layers of an onion. As the skies expanded, galaxies formed, and the Earth was made suitable for humans through a systematic process.

18. **Time Line**

Different methods of measurement suggest the age of the Universe is between 8 and 14 billion years. However, the cyclic universe of the Six-Day model requires less time to become suitable for us. A likely timeline of the Six-Day Model of Creation is given below:

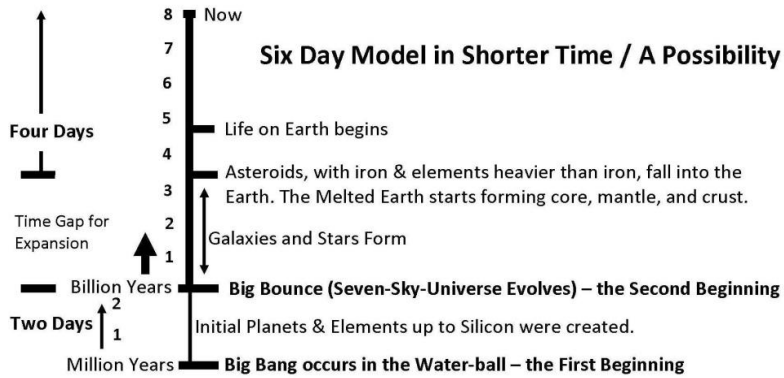


FIGURE 70: Time Line

19. **Conclusion**

When we begin asking questions, we come to see the Earth as a special creation. There are many questions that remain unanswered, such as: How was the atmosphere produced? How was free oxygen produced? How were the oceans formed? And so on.

If the Earth captured an atmosphere during its formation, it would have been filled with heavier gases, such as neon, argon, and krypton. If it ever had an atmosphere, it likely escaped in the past. Scientists believe that the current atmosphere was produced from gases released by the melting Earth.

The presence of free oxygen, however, remains a mystery. If oxygen were released from the molten Earth, it would form compounds, as oxygen is a highly reactive element. While plants produce free oxygen, unless some of it is removed, the oxygen would recombine, nullifying the balance. And why should oxygen make up 21 percent of the

atmosphere, rather than 5 or 50 percent? In the end, one must accept their model, as it is scientific in some respects.

A universe so finely tuned could not have evolved without the intervention of God.

> Do they not look at the sky above them—how We have made it, and adorned it, and there is no flaws in it? [Al Quran 50:6]

A few stars show signs of having planets. Yet, many argue that there are trillions of planets in the universe, and by chance, one has become suitable for life. However, in reality, unless something is created with intelligence, it does not take on a useful shape.

End